

DELIVERED THROUGH THE
EXPERT ADVISORY CALL-DOWN SERVICE (EACDS) LOT B:

STRENGTHENING RESILIENCE AND RESPONSE TO CRISES

PRODUCED FOR



**AIRBEL
CENTER**
DESIGNING & TESTING SOLUTIONS IN CRISES



INNOVATIVE FINANCING FOR RESPONSES TO REFUGEE CRISES

COURTENAY CABOT VENTON, JULIAN RICHARDSON, TOSCANE CLAREY &
GINEVRA JARMAINE

03 2019

IMPLEMENTING PARTNERS:



SERVICE IMPLEMENTATION BY A DAI CONSORTIUM

EXPERT ADVISORY CALL DOWN SERVICE – LOT B

STRENGTHENING RESILIENCE AND RESPONSE TO CRISES

THE SERVICE

Through the Lot B: Resilience service, DAI offers rapid response, high quality support to UK Government and other donors, across a wide range of development and humanitarian challenges.

We offer support for risk informed design for development interventions across all sectors; risk and contingency financing; understanding changing systems; and strategic integration of humanitarian action and development.

We offer a clear process for users that draws upon a well-established network of relevant expertise provided through over 60 consortium partners. We are able to build strong practical partnerships for rapid and responsive delivery through:

- > A dedicated, easy-to-access Secretariat to manage new enquiries and assure delivery
- > Consistent end-to-end quality assurance
- > A user friendly, customer-oriented outlook
- > A pro-active approach to knowledge sharing and communication
- > A focus on due diligence, efficiency and cost effectiveness.

ACKNOWLEDGEMENTS AND DISCLAIMER

This document has been produced by DAI Europe Ltd. & Parhelion Underwriting with the assistance of the UK Department for International Development, Centre for Disaster Protection & the International Rescue Committee Airbel Center, contracted through the EACDS Lot B service 'Strengthening resilience and response to crises', managed by DAI Europe Ltd. under contract to the UK Department for International Development.

The views expressed in this document are entirely those of the authors and do not necessarily represent the UK Department for International Development, Centre for Disaster Protection, or the International Rescue Committee Airbel Center's own views or policies, or those of DAI. Comments and discussion on items related to content and opinion should be addressed to the authors, via info@lotb-resilience.org.

Your feedback helps us ensure the quality and usefulness of all knowledge products. Please email: info@lotb-resilience.org and let us know whether you have found this material useful; in what ways it has helped build your knowledge base and informed your work; or how it could be improved.

First Published
March 2019
© CROWN COPYRIGHT

CONTENTS

LIST OF ABBREVIATIONS	I
FOREWORD	III
EXECUTIVE SUMMARY	V
1 INTRODUCTION	1
1.1 BACKGROUND	1
1.2 INNOVATION LAB AND PREPARATORY INPUTS	2
1.3 SCOPE, APPROACH AND METHODOLOGY	2
2 SUMMARY OF EVIDENCE	5
2.1 INTRODUCTION	5
2.2 RETROSPECTIVE EXPENDITURE ANALYSIS	5
2.3 CASE STUDY OVERVIEW.....	5
2.4 ECONOMICS OF ALTERNATIVE EXPENDITURE.....	6
3 FINANCIAL FRAMING	8
3.1 SPEED CHALLENGE	8
3.2 DURATION CHALLENGE	9
3.3 SHAPE CHALLENGE.....	10
3.4 HOST COUNTRY CHALLENGE	10
3.5 GLOBAL CHALLENGE	11
4 INNOVATIVE FINANCE	12
4.1 INNOVATIVE FINANCE IN OTHER DEVELOPMENT AND HUMANITARIAN CONTEXT	12
4.2 INNOVATIVE FINANCE IN THE REFUGEE ASSISTANCE CONTEXT	13
4.3 CHARACTERISTICS OF INNOVATIVE FINANCIAL INSTRUMENTS	14
4.3.1 The Role of Risk Transfer Mechanisms	14
4.3.2 Triggers	15
4.3.3 Risk Profiles	15
4.3.4 Regulatory Frameworks.....	16
4.3.5 Funding Mechanisms	16
5 INNOVATION LAB OUTCOMES AND OPPORTUNITIES FOR FINANCIAL INSTRUMENT INNOVATION	17
5.1 INSURANCE AND INSURANCE LINKED SECURITIES	18
5.1.1 Parametric Insurance	18
5.1.2 Catastrophe Bonds	18

5.2	OTHER SECURITISED INSTRUMENTS.....	22
5.3	INSTRUMENTS RELATED TO HOST COUNTRY INCENTIVISATION	24
5.4	OTHER CREDIT INSTRUMENTS	27
5.4.1	Contingent Credit	27
5.4.2	Credit Guarantees.....	27
5.5	DEBT RELIEF INSTRUMENTS	27
5.5.1	Debt Swaps.....	27
5.6	OTHER SOURCES OF FUNDING.....	28
5.6.1	Revolving Funds.....	28
5.7	SOLUTIONS RELATED TO ACCESS TO INFORMATION	28
6	CONCLUSION	28
7	LIST OF ANNEXES	32
7.1	ANNEX 1 – RETROSPECTIVE EXPENDITURE ANALYSIS.....	32
7.2	ANNEX 2 – CASE STUDY: BANGLADESH.....	32
7.3	ANNEX 3 – CASE STUDY: JORDAN	32
7.4	ANNEX 4 – CASE STUDY: KENYA	32
7.5	ANNEX 5 – GLOBAL CHALLENGE	32
7.6	ANNEX 6 – ECONOMICS OF ALTERNATIVE EXPENDITURE	32
7.7	ANNEX 7 – SUMMARY OF INNOVATIVE FORECASTING TOOLS FOR REFUGEE CRISES...32	
7.8	ANNEX 8 – SUMMARY OF DATA SOURCES FOR REFUGEE CRISES	32
7.9	ANNEX 9 – INNOVATION LAB: INFORMATION-BASED SOLUTIONS	32

LIST OF FIGURES

Figure 1 - Jordan: Trends in Total Reported Funding for all Humanitarian Assistance, 2009-2019.....	9
Figure 2 - UK Humanitarian Spend, 2000-2016.....	11
Figure 3 - Instruments for Financing Disaster Risk	14

LIST OF ABBREVIATIONS

ABS	Asset Backed Security
ARC	African Risk Capacity
Cat Bond	Catastrophe Bond
Cat DDO	Catastrophe Deferred Drawdown Option
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CDO	Collateralised Debt Obligation
CDS	Credit Default Swaps
CERF	Central Emergency Response Fund
DFI	Development Finance Institution
DFID	United Kingdom Department for International Development
DRC	Democratic Republic of Congo
DR DIP	Development Response to Displacement Impacts Project
EACDS	Expert Advisory Call Down Service
EC	European Commission
EU	European Union
FI	Financial Institution
FTS	Financial Tracking Service
GCFE	Global Concessional Finance Facility
GCR	Global Compact on Refugees
GDP	Gross Domestic Product
GRF	Global Refugee Finance Cat Bond
GSF	Goldman Sachs Foundation
HCB	Humanitarian Catastrophe Bond
HRP	Humanitarian Response Plan
ICRC	International Committee of the Red Cross
IDA	International Development Association
IDTECT	Internal Displacement Event Tagging Extraction and Clustering Tool
IDMC	Internal Displacement Monitoring Centre
IDP	Internally Displaced Person/People
IFC	International Finance Corporation
IFI	International Financial Institution
IFRC	International Federation of Red Cross and Red Crescent Societies
ILS	Insurance Linked Security
ILW	Industry Loss Warranty

INGO	International Non-Governmental Organisation
IOM	International Organization for Migration
IRC	International Rescue Committee
MIGA	Multilateral Investment Guarantee Agency
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Cooperation and Development
OPIC	Overseas Private Investment Corporation
PCRIC	Pacific Catastrophe Risk Insurance Facility
PEF	Pandemic Emergency Financing Facility
PFI	Private Finance Initiative
RCRC	Red Cross & Red Crescent
SME	Small to Medium Size Enterprise
ToC	Theory of Change
ToR	Terms of Reference
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WB	World Bank
WFP	World Food Programme
XOL	Excess of Loss

FOREWORD

Almost nothing can be as horrifying as a sudden humanitarian catastrophe and nearly 3 million people were affected by Cyclone Idai in southern Africa this year alone.

As of last year, 68 million human beings had been forced from their homes by persecution or conflict. That is nearly one person every two seconds. More than 25 million of them are refugees, many of whom will remain away from their homes for decades. They urgently need shelter, food, protection, and the chance to make new lives for themselves and their families.

The enormity of this challenge demands that we employ every available tool and fashion new ones to respond faster and better. Insurance and other financial instruments are all too often dismissed as dry and dull. Yet the reality is that they have huge potential to help people cope with these terrible shocks by ensuring money is available rapidly and reliably. In 2017, for example, a regional insurance pool provided \$55 million to hurricane-struck Caribbean islands within days. Imagine the difference it would make if the right amount of funding was triggered automatically and could be put to immediate use to help refugees. Needs would be met, and recovery kick-started. This isn't just a technical fix, it could do so much to avert human suffering.

This Innovation Lab, convened in London and New York by DFID, the Centre for Disaster Protection, and International Rescue Committee (IRC), has generated ideas that offer real hope. DFID and IRC are now looking at how to develop some of them in the months ahead. In advance of a Global Refugee Forum later this year, this report is a springboard for action and an invitation to our partners around the world to engage with this crucial work.



A handwritten signature in black ink that reads "Rory Stewart". The signature is written in a cursive, flowing style.

The Rt Hon Rory Stewart OBE MP
UK Secretary of State for International Development



There is a change underway in how we fund humanitarian response. It is driven by advances in innovative finance, new opportunities opened up through data science and computation, and unwavering demand by those in the humanitarian system for a change in how we finance the work we do. However, excitement about this change has often outstripped progress made. This report aims to close that gap and bring into clearer relief a picture of a new humanitarian system driven by risk-based financing.

The potential power of these instruments is promising. They hold the promise to deliver life-saving aid to those affected by conflict more effectively *and* efficiently. They hold the promise of depoliticizing which crises are funded by committing actors to a set of systematic rules about response. And, they hold the promise of doing business differently by restructuring the very financial incentives that shape the way the sector looks today.

The crucial next step is testing whether the instruments outlined here will indeed deliver on that promise. The IRC and DfID are committed to making the ideas outlined here a reality and delivering on those tests.

We come to this work grounded in the humility that there are no silver bullets. But we are relentlessly committed to the pursuit of improving our sector and the lives of our clients. We also know that no single donor or implementing agency can drive the broad type of change needed. We hope this report serves as a foundation for the future of innovative finance for humanitarians and a call to all partners, both inside and outside the sector, to push forward this agenda.

Sincerely,

A handwritten signature in black ink, appearing to read "David Miliband". The signature is fluid and cursive, written in a professional style.

Hon. David Miliband

President and CEO of the International Rescue Committee

EXECUTIVE SUMMARY

This report has been prepared to provide an overview and assessment of innovative financing concepts and instruments that could be applied to support the response to refugee crises, as well as recommendations to further develop the financing of response to refugee crises, based on the outputs of an Innovation Lab held in late 2018 as well as desk-based research.

New approaches are required to address the growing scale, duration, and impact of refugee crises worldwide. This is highlighted by the recent adoption of the Global Compact on Refugees, which aims to establish an internationally-agreed, stronger and more equitable response to refugee crises, focused on sustainable livelihoods for both refugees and host communities. The success of such approaches and of the broader scope of sustainable humanitarian and development responses must be supported by the securing and structuring of adequate funding, and new financing tools and methods are needed to realise this aim. The humanitarian system is becoming increasingly strained, and preliminary analysis undertaken for this report indicates that alternative expenditures on refugee response, compared to the 'traditional' style of humanitarian response that has been employed to date, have the potential to save billions of dollars in humanitarian funding and avert human suffering.

The research conducted in preparation for the Innovation Lab identified five core challenges in financing responses to refugee crises, namely the **speed** of the arrival of financing, the sustained **duration** of financing, the use (**shape**) of financing, the **incentivisation** of host countries through financing, and the increasing global **frequency** and severity of crises placing further demand on current humanitarian financing. In this strained financing context, the role of innovative finance has become increasingly important. Innovative financing for responses to refugee crises could include the development of new financial mechanisms, or the adaptation and application of non-traditional mechanisms (particularly those from capital and insurance markets) to meet humanitarian and development financing needs.

In response to these challenges and opportunities, an Innovation Lab was co-convened by the Centre for Disaster Protection and the International Rescue Committee Airbel Center, with sessions hosted in London and New York City in late 2018 bringing together experts from the humanitarian, development, finance, insurance and policy fields. The Innovation Lab aimed to generate a broad range of innovative financing solutions, with the most feasible to then be developed further.

There was a range of financial solutions proposed at the Innovation Lab, including:

- > Insurance and Insurance Linked Securities

Two parametric instruments, that could be structured as catastrophe bonds or as parametric insurance:

- (1) Global Refugee Finance Catastrophe Bond

- Designed to cover high severity scenarios, involving multiple countries/crises and large refugee flows, to ensure that sufficient resources are available even in periods of exceptionally high need.

- (2) Humanitarian Catastrophe Bond

- Designed to manage emergency liquidity and enable the rapid deployment of funds, conditional on pre-agreed policy measures.

Both of these instrument types also enable multiple parties to pool their risk, such as in regional or global risk pools, to improve the diversification of the instrument and in turn reduce the cost of the instrument relative to its risk exposure.

> Other Securitised Instruments

One asset-backed security, utilising securitisation to repackage small assets and structure risk in layers, with an aim to attract large flows of private capital:

(3) Humanitarian Blended Bond

Collateralised Debt Obligation structure designed to support large scale infrastructure investment in host countries.

> Instruments related to Host Country Incentivisation

(4) Host Incentivising Development Impact Bond

Designed to incentivise current or potential host countries, with financing conditional on the achievement of pre-agreed results/impact of hosting policies or programmes.

(5) Resettlement Challenge Fund

Designed for current or potential host countries to submit funding proposals, for hosting policies or programmes developed by the host and refugee communities themselves.

A number of additional financial instruments were also discussed at the Innovation Lab, although not developed into full proposals, including:

> Other Credit Instruments

These instrument types can enable faster, more reliable access to funds, and with conditionality of access to credit can also enable greater risk management and results incentivisation:

(6) Contingent Credit

(7) Credit Guarantees

> Debt Relief Instruments

These instruments were discussed as particularly relevant in the refugee financing context, as often host countries are low-middle income countries with existing debt burdens, and so debt relief can act as a strong incentive and opportunity for collaboration.

(8) Debt Swaps

> Other Sources of Funding

(9) Revolving Funds

Options discussed at the Innovation Lab included a revolving fund held centrally, for example by the UN or World Bank, and could be contributed to through a levy on UN members or GCR signatories.

It was evident through the output of the Innovation Lab and the level of stakeholder engagement that there are significant opportunities to further develop innovative financing structures to better support the response to refugee crises, ultimately to improve the lives of refugees. The Innovation Lab yielded a range of specific suggestions on new financing approaches, set out in this report, alongside some overarching insights and recommendations on how to continue the development of innovative financing initiatives for future refugee crises:

Stakeholder Collaboration

As a diverse range of stakeholders need to be engaged, it will be important for a lead organisation to draw these actors together and facilitate the continued collaboration between the humanitarian, development, insurance and finance sectors.

Data Sources

The current lack of data on refugee crises, particularly related to how responses have been funded historically, has been a recurrent problem in the delivery of this research and the Innovation Lab, and will continue to limit the development of innovative financing initiatives. As such, improvements to the collection of, access to, and usability of relevant data is essential.

Communications

The ongoing work in innovative financing for refugee crises needs to be communicated effectively, to increase interest and build support for initiatives, and to generate a common language within such a diverse network. This could include the publication of reports, engagement with media, and high-level meetings, as well as the development of a 'good practice guide' for innovative financing solutions.

Development of Financial Instruments

The scoping, structuring and implementation of innovative financial instruments will be essential in successfully delivering new approaches to supporting refugees. As such, it is recommended to conduct further research and scoping of 3-4 instrument types, including a mapping of needs, potential partners, and feasibility across different geographic areas or existing crises, with an aim to then select 1-2 pilot instruments to be developed.

When considering the current context of financing for refugee crises, along with the discussions and solutions proposed at the Innovation Lab, a few focus areas are apparent. Firstly, the existing humanitarian system is already under increasing pressure, with funding from existing donors limited. As such, instruments that rely too heavily on attracting additional funding from existing donors are less likely to gain traction. Rather, it could be more fruitful to focus on instruments that have the potential to attract new actors and sources of funding, particularly private sector capital. Furthermore, rather than reinventing the wheel, emphasis should be on learning from and adapting successful risk-based financing instruments from other sectors.

Based on these considerations, the proposed focused instrument types include:

- > Parametric insurance and insurance-linked securities, including risk pools, as discussed in Section 5.1
There is now significant experience among donors, recipient governments and responders in the development of disaster risk parametric insurance pools. As such, appetite for such an instrument could be higher than a new type of instrument, and there are a number of lessons to be learnt from these examples that can be applied to the refugee financing context.
The Global Refugee Finance Cat Bond (Solution 2), which can be considered in the context of Cat Bonds or Parametric Insurance, has significant potential for risk transfer to the private re/insurance sector due to its risk profile. As such, this instrument type has potential for uptake by the private sector, attracting new sources of capital
- > Other securitised instruments, such as the Humanitarian Blended Bond (Solution 3), as discussed in Section 5.2.
This instrument aims to respond to infrastructure needs in host countries, through the development of a securitised product. The tiered structure of this instrument attracts both public sources of funding and new sources of private capital. The 10,000 Women Facility, seeded by the IFC and Goldman Sachs Foundation, supported by OPIC, is reported to have deployed US\$1bn of capital to women entrepreneurs in 56 emerging market countries, and is an example of a similar instrument that could be looked to for learnings.
- > An Impact Bond (Solution #4) to incentivise refugee integration in host countries, as discussed in Section 5.3.
Drawing on the examples such as the ICRC Humanitarian Impact Bond, this instrument type can attract new sources of investment, by managing risk and incentivising results through a performance-based payment structure. However, it is important to note that Impact Bonds require programme impact to be very accurately measured, meaning that this instrument type is only applicable to specific, typically smaller-scale types of interventions.

A New System of Financing for Responses to Refugee Crises

Responses to refugee crises require innovative approaches to financing that are more efficient, more effective, more equitable, and more sustainable. The Innovation Lab has acted as an important catalyst in the multi-sector, collaborative effort required to deliver innovative financing for future refugee crises, and has identified key focus areas to further this initiative. Each of the recommendations detailed in this report are interrelated, and ultimately represent the catalysation of a new system of financing for responses to refugee crises, with a consistent purpose, common language, and a collaborative, evidence-based and action-oriented path forward.

1 INTRODUCTION

1.1 BACKGROUND

More than 68 million individuals are displaced worldwide, 25.4 million of whom are refugees, forcibly displaced by persecution, conflict and violence¹. Refugee numbers have increased by more than 10% in the last year alone², and over 80% of refugee crises last in excess of ten years - two in five more than twice as long³.

The nature of refugee crises worldwide is changing. The number of refugees has now increased for the sixth year in a row⁴, and an increasing proportion of refugees are considered by the United Nations High Commissioner for Refugees (UNHCR) to be in protracted refugee situations⁵. Also increasingly evident is the need for a new approach to supporting these refugee crises – while immediate humanitarian assistance remains crucial, there is an increasing need for more sustainable approaches to addressing the needs of refugees and creating opportunities for refugee self-reliance.

Some 85% of refugees are hosted in developing regions, one third of all refugees in some of the world's least developed countries⁶.

Refugee hosting countries are under increasing pressure to host growing numbers of refugees, with many already facing existing physical and financial resource constraints. Support to refugees is also notably underfunded⁷, and just ten donors provide more than 75% of the contributions to the UNHCR budget⁸. As demands on host countries and donors continues to increase, a more effective and equitable global approach to responding to refugee crises is required.

The UN Global Compact on Refugees (GCR), which was adopted on 17th December 2018⁹, establishes the architecture for an internationally-agreed, stronger, more predictable, and more equitable response to new and existing large refugee crises. The GCR aims to embed an approach to supporting refugee crises that is focused on sustainable livelihoods, jobs and access to services for both refugees and host communities, linked to commitments from host countries that actively increase refugee freedom of movement, right to work and access to education.

The GCR recognises that "the mobilization of timely, predictable, adequate and sustainable public and private funding...is key to the successful implementation of the global compact."¹⁰

The GCR makes a compelling case for how to better respond to refugee crises and notes the importance of funding in achieving this. Given the still increasing number of refugees, duration of displacement, and currently unequal distribution of hosting and funding of refugee crises, the success of the GCR and the broader scope of sustainable humanitarian and development support will depend on the effective structuring and securing of

¹ UNHCR, Global Trends in Forced Displacement, 2017, <https://www.unhcr.org/globaltrends2017/>

² From calendar year ending 2016 to calendar year ending 2017. See: UNHCR, Global Trends in Forced Displacement, 2016, and UNHCR, Global Trends in Forced Displacement, 2017

³ Crawford N et al, 2015, *Protracted displacement: uncertain paths to self-reliance in exile*, Overseas Development Institute, London, <https://www.odi.org/publications/9906-protracted-displacement-uncertain-paths-self-reliance-exile>

⁴ UNHCR, Global Trends in Forced Displacement, 2011-2017

⁵ Defined by the UNHCR as 'When 25,000 or more refugees of the same nationality have been in exile in a particular country for five consecutive years'. See UNHCR, Global Trends in Forced Displacement, 2015, and UNHCR, Global Trends in Forced Displacement, 2016

⁶ UNHCR, Global Trends in Forced Displacement, 2017

⁷ UNHCR, Global Focus Financials, 2017, <http://reporting.unhcr.org/financial>

⁸ UNHCR, Global Focus Financial Contributions, 2017, <http://reporting.unhcr.org/financial#tabs-financial-contributions>

⁹ UN News, UN affirms 'historic' global compact to support world's refugees, 17 December 2018, <https://news.un.org/en/story/2018/12/1028791>

¹⁰ United Nations, General Assembly, Report of the United Nations High Commissioner for Refugees - Part II Global compact on refugees, A/73/12 (Part II), 13 September 2018), https://www.unhcr.org/gcr/GCR_English.pdf

adequate funding. This will be essential not just to deliver these new approaches, but also to demonstrate the international community's continuing commitment to host countries.

As the approach to supporting refugee crises begins to shift, ways of funding must also adapt. The growing scale, duration and impact of multiple semi-permanent refugee crises requires innovative approaches to financing that are more efficient, more effective, more equitable, and more sustainable.

1.2 INNOVATION LAB AND PREPARATORY INPUTS

In response to this need for innovative financial solutions to respond to global refugee crises, the UK Department for International Development (DFID)-funded Centre for Disaster Protection and the International Rescue Committee (IRC) Airbel Center co-convened an Innovation Lab.

The Innovation Lab aimed to harness the momentum generated by the adoption of the GCR, the growing global awareness of refugee crises and advances in innovative financing to reinvigorate international funding and support for refugee crises worldwide. A key objective of the Innovation Lab was to help ensure that the GCR's approach to responding to refugee crises is supported by fresh thinking on viable options for funding and financing that response. DFID and the IRC will look to use the outcomes of the Innovation Lab to influence the thinking and practice of a wide set of actors in the refugee policy space – a very timely initiative, particularly in the run up to the first Global Refugee Forum initiated by the GCR, expected in late 2019.

To achieve this, the Innovation Lab brought together leading-edge expertise from the finance, insurance, policy, humanitarian and development fields, in a coordinated effort to address the technical, market and political-economy challenges that have limited risk-financing for refugee crises to date. This cross-section of stakeholders ensured a blending of perspectives and experience, which was essential in bridging the traditional gaps between these sectors. The Innovation Lab required bold thinking and transformative approaches, and participants were selected based on their ability and experience to challenge status quo thinking.

Across two intensive one-day events, one held in London in September 2018 and the other held in New York City in November 2018, this diverse range of participants were tasked with developing specific, actionable innovative financing solutions for the response to refugee crises, including new instruments, products and vehicles - particularly risk-based financing tools. The agenda also included a number of brief presentations on innovative financing mechanisms from other humanitarian and development contexts, which are summarised in Section 4. These presentations provided participants with a good foundation for the potential of innovative financing and some of the factors to be considered, such as the use of technology to support innovative financing structures.

The delivery of the Innovation Lab required significant preparatory work, to frame the challenge and provide participants with a range of contexts and real-world data to engage with in a practical way, presupposing no prior knowledge of financing for refugee responses. Additionally, an assessment of the solutions proposed at the Innovation Lab was required to support the further development, implementation and scaling of the financial instrument concepts. DAI Europe Ltd. was selected as the supplier of these preparatory and assessment inputs, procured by DFID through the Expert Advisory Call Down Service (EACDS) Lot B Framework.

1.3 SCOPE, APPROACH AND METHODOLOGY

As advised by the Centre for Disaster Protection and the IRC Airbel Center (the two Centres), the scope of the Innovation Lab and preparatory inputs focused on the following areas:

- > Deployment of funds by host countries, multi-laterals (particularly the United Nations (UN)), and international non-governmental organisations (INGOs);
- > Provision of funds by donors, multi-laterals, and new entrants (such as the private sector);
- > Sovereign/macro-level instruments (including forecast and early action contingent financing mechanisms, debt/development investment instruments, private finance initiative (PFI) arrangements, and donor/philanthropic grants/remittances);

- > Financial instrument structuring (including timing and nature of expenditure, release mechanisms for funds, shifting from ex-post to ex-ante contingent instruments, and the inclusion of longer-term development objectives into instrument design); and
- > Severe crises arising from cross-border refugees fleeing sudden conflict and persecution. The scope did not include internally displaced people (IDPs).

The preparatory work was desk-based, using a combination of web searches, a review of key literature, and consultation with relevant stakeholders to gather and further explore data sets to fill key gaps in the evidence and strengthen the analyses. The research team utilised their own networks, but also called on the two Centres for support in identifying key data sets, literature, and for introductions to relevant stakeholders where required.

1.3.1 Retrospective Expenditure Analysis

A retrospective expenditure analysis was conducted to gather and map data on refugee flows and funding, both at a global level and for three country case studies. To the extent possible, data was summarised over time (to allow for historical context as well as potential modelling of future expenditures). High-level descriptive data was presented on the overall context, where it was available, specifically:

- > The duration that refugees have been displaced and the arc of how the number of refugees changed;
- > The number of refugees relative to the local host country population;
- > Trends in refugee funding; and
- > The degree to which refugees have been or are able to integrate into the labour market and able to access other public services (although data in this regard was very limited).

Data was also collected on the nature of funding:

- > Who paid for displacement?
- > When did they pay?
- > Which organisation did they pay funds to? and
- > What did they pay for?

It should be noted that little to no data existed or could be identified for some of these key data points, and is only reported on where data exists. The retrospective expenditure analysis can be found in full in Annex 1, and is also discussed further in Section 2 of this report.

1.3.2 Case Studies

An initial step was to agree with the two Centres the selection of three country case studies to be developed in support of the Innovation Lab. These case studies were selected according to the following criteria:

- > A range of geographical coverage;
- > A contrast of political environments and conduciveness to host/refugee integration;
- > A range of timespans of crises;
- > The availability and quality of data, particularly on the economics of alternative expenditure scenarios which were key to undertaking any modelling; and
- > The existence of interesting and innovative forecasting tools, to facilitate conversations around new ways of forecasting refugee flows.

From a long-list of ten countries, and following a rapid, light-touch characteristic mapping and data review, Bangladesh, Jordan and Kenya were selected as the three case studies. Kenya offers an opportunity to compare two very different approaches to camp management in the same location, Bangladesh offers insights into a new crisis, and Jordan offers a middle-income context to explore a longer-lasting crisis. These case studies were used to prompt and support discussions at the Innovation Lab, and are discussed further in Section 2 of this report. The case studies are also included in full in Annexes 2, 3 and 4.

1.3.3 Economics of Alternative Expenditure

The first step to assess the economic implications of alternative expenditure profiles was to construct an overall Theory of Change (ToC), considering key questions on the potential outcomes of alternative expenditure

profiles, and the effect this has on the humanitarian caseload, the cost of response and the long-term economic costs. This assessment focused primarily on 1) more rapid humanitarian response (compared with a more traditional/late humanitarian assistance) and 2) alternative approaches to assimilating refugee populations into host communities (compared with placing people in camps or with limited support in host communities).

The ToC provides a framework and structure for assessing the evidence on the economic implications of alternative expenditure profiles. The analysis then focused on 1) changes in costs 2) avoided losses to refugee populations and host communities and 3) benefits as a result of an alternative response.

The Economics of Alternative Expenditure analysis is discussed further in Section 2 of this report, and included in full in Annex 6.

1.3.4 Catastrophe Risk Modelling

Initial catastrophe risk modelling was undertaken to assess the feasibility of risk-based instruments in the context of financing for responses to refugee crises. This included a technical analysis of the data and models related to forecasting conflict and displacement, including on the frequency of onsets of refugee flows and the accuracy of existing data in predicting displacement onset. This draft analysis can be found in full in Annex 5.

The DAI research team also developed a summary of innovative conflict and displacement forecasting initiatives that could potentially be used to underpin related financing. This summary can be found in Annex 7.

1.3.5 Financial Framing

As the Innovation Lab participants came from a diverse range of professional backgrounds, it was important that the preparatory inputs appropriately framed the challenges in a financial context, to enable rapid and practical engagement by attendees. The Financial Framing is detailed in Section 3 of this report.

1.3.6 Innovation Lab Participation

The full research team, as well as a representative from the EACDS Lot B team, attended and supported the delivery of both of the Innovation Lab sessions. The team contributed to the development of the initial Innovation Lab agenda in collaboration with the two Centres and the facilitation team, and presented the research findings at the London and New York Innovation Lab sessions to prompt and guide discussion.

1.3.7 Review of Innovation Lab Outcomes

Following the two Innovation Lab sessions, the research team have undertaken a review of the outcomes and ideas generated, as well as some additional financing options that may also have potential for further development. This review includes an overview of the ideas, an assessment of their pros, cons and feasibility, and recommendations for next steps. This review is detailed in Section 5 of this report.

1.3.8 Limitations

The availability of sufficient and accessible data was a significant restriction to the team's ability to conduct further analysis. Specifically, systematic data on refugees is only available in relation to the demographics of refugee populations, and any information on expenditures or funding is only available for all humanitarian crises in aggregate¹¹. However, this is a useful indicator of the need for more robust data sources to support initiatives in innovative financing for future refugee crises. The research team developed a summary of data sources that could potentially be used to develop innovative financing for refugee crises, which can be found in Annex 8.

¹¹ Options to enhance the mapping of financial flows for disasters are proposed in: Weingärtner, L., 2019 (forthcoming), *Mapping Financial Flows for Disasters*, DFID & Centre for Disaster Protection commissioned report, ODI, London. See also: RMS & ODI, 2017, *Mapping the role of insurance in managing disaster losses. A study of low and low-middle income countries*. which presents a methodology to differentiate financial aid flows for natural hazard-related disasters from other humanitarian disaster flows.

2 SUMMARY OF EVIDENCE

2.1 INTRODUCTION

This section summarises the data analysis that was conducted in preparation for the Innovation Lab, including:

- > The global retrospective data analysis;
- > Highlights from the country and global case studies; and
- > The economic case for alternative expenditures.

Full reports can be found for each of these sections in the supporting annexes.

2.2 RETROSPECTIVE EXPENDITURE ANALYSIS

Globally, the number of refugees increased rapidly in recent years, putting pressure on the humanitarian system to respond. Moreover, the countries that receive and host refugees are generally those with the least resources to do so, most often low to middle income countries themselves. Data on the number of refugees as a percentage of population show that Lebanon hosts the largest number of refugees relative to its population: 169 refugees for every 1,000 Lebanese, followed by Jordan and Turkey. The largest number of refugees, in terms of overall refugee flows, come from four countries – Syria, Afghanistan, South Sudan, and Somalia.

Trends in funding are less clear - as mentioned above, data on funding is available only for the entire humanitarian system, aggregating conflict (refugees and IDPs) with natural disasters. Overall, humanitarian assistance has continued to rise year on year, with needs continuing to outstrip available funds by a large margin. The top donors globally in 2017¹² were the US, Germany, EC, the UK and Japan, with the majority of funding channelled to multilaterals, non-governmental organisations (NGOs), Red Cross Red Crescent (RCRC) and the public sector¹³.

The most funded humanitarian assistance sectors globally in 2017 were food security, multi-sector, health, coordination and support services, and nutrition¹⁴.

Annex 1 contains the complete retrospective data analysis globally.

2.3 CASE STUDY OVERVIEW

As described above, three country case studies – Bangladesh, Jordan and Kenya – were selected to represent three different geographical regions, a contrast of political environments, as well as including both recent and longstanding displacement events.

- > **Bangladesh:** From 25 August 2015, targeted violence against Rohingya communities in Rakhine State, Myanmar, forced a massive exodus to Bangladesh, in what has been one of the fastest growing refugee crises in the world, and creating the largest refugee camp in the world. The population in the area of Cox's Bazaar grew by 30% - from 2.3 million to 3 million with the new arrivals.¹⁵ One of the more significant barriers to an effective response has been a lengthy and bureaucratic process in place for NGOs to operate in the camps, which in turn means that NGOs have not been able to implement their plans.¹⁶ Rohingya in Bangladesh are not allowed to integrate into the labour market except in very nominal terms (e.g. through selling firewood).

¹² 2017 is the latest full year for which data are available, reported and complete.

¹³ "Public sector" refers to the OECD definition that states: "The public sector comprises the general government sector plus all public corporations including the central bank."

¹⁴ Multi-sector" refers to projects and activities with no one dominant sector and often applies to UNHCR assistance for refugees. FTS Glossary. <https://fts.unocha.org/glossary>

¹⁵ Martin, W. (2017). "Strategic Recommendations for Shelter Upgrade in Response to the Rohingya Humanitarian Crisis."

¹⁶ UK House of Commons, International Development Committee (2018). "Bangladesh and Burma: the Rohingya Crisis." Second Report of Session 2017-19.

- > **Jordan:** Jordan is one of the countries most affected by the Syria crisis, with the second highest share of refugees compared to its population in the world.¹⁷ In its ongoing efforts to further improve its holistic response to the impact of the Syria Crisis, Jordan engaged in a pioneering initiative by signing the Jordan Compact in 2016. Through the Jordan Compact, the government sought to transform the refugee crisis into a development opportunity that attracts new investments and opens up the EU market with simplified rules of origin, thus creating jobs for both Jordanians and Syrian refugees in a complimentary, non-competitive manner.¹⁸ Jordan thus represents one of the most conducive contexts for refugee integration.
- > **Kenya:** Kenya hosts the 10th largest population of refugees in the world¹⁹, and has done so for decades. Since the early 1990s refugees in Kenya have been accommodated in camps and denied the right to work, with limited movement outside of camps. However, the degree to which refugees are successfully integrated into the labour market and able to access other public services is highly differentiated at a sub-national level, despite a consistent and fairly restrictive national level policy.
- > **Global:** The global frequency and severity of refugee crises varies over time. Data published by the UNHCR going back to 1952 shows that refugee funding and finance also varies significantly over time. The data was analysed to consider whether refugees are flowing in to or out of countries; the scale of these flows and how many countries are being impacted at any one time.

Annexes 2, 3 and 4 contain the full data analysis for each of the country studies; and further supporting details on each of the country case studies are provided in the financial framing section below. The global analysis can be found in Annex 5.

2.4 ECONOMICS OF ALTERNATIVE EXPENDITURE

2.4.1 Introduction

In a context where refugee influxes are growing in size, consistently underfunded, and persistently lasting for upwards of 10 years²⁰, there is an urgent need to re-think how the international humanitarian community can best respond to these events, both in terms of better prediction and mitigation of these events, as well as greater levels of investment in effective long-term planning to deliver more sustainable outcomes.

A 2018 study on the Economics of Early Response to drought crises, funded by USAID²¹, found that greater investment in earlier response and longer-term resilience building measures would yield benefits of US\$2.80 for every US\$1 spent, saving billions of dollars for international humanitarian assistance budgets, as well as mitigating income and asset losses for those most affected.²² This study helped to re-frame the way that natural disasters are funded, with a much greater focus on financing mechanisms that can respond to forecasts and invest in early action and resilience building. The evaluation of the economics of alternative options for response has been key to facilitating this shift, by demonstrating the value for money of doing so.

The focus of alternative expenditures in response to refugee crises is very much forward-looking, requiring substantive front-loading of investment to ensure provision of access to basic services in the first instance, and then investing in alternatives to ongoing encampment, whether through integration, self-reliance or safe return to country of origin.

¹⁷ UNHCR February 2018 Factsheet, Jordan

¹⁸ The Jordan Response Plan for the Syria Crisis, 2017-2019

¹⁹ UNHCR (2017). "Global Trends in Forced Displacement in 2017."

²⁰ Crawford N et al, 2015, *Protracted displacement: uncertain paths to self-reliance in exile*, Overseas Development Institute, London, <https://www.odi.org/publications/9906-protracted-displacement-uncertain-paths-self-reliance-exile>

²¹ This study built on an earlier study, funded by DFID, with the following citation: Cabot Venton et al (2013). "The Economics of Early Response and Resilience", DFID, UK.

²² Cabot Venton (2018). "The Economics of Resilience to Drought in Ethiopia, Kenya and Somalia". USAID, Washington, D.C

2.4.2 Theory of Change

The economics of alternative expenditure's Theory of Change considers three scenarios of financing responses to refugee crises:

1. **A traditional humanitarian response** to refugee crises. Funding generally depends on humanitarian appeals, is ad hoc, can be slower to arrive and/or declines with time, and the crisis is typically underfunded.
2. **An earlier and sustained humanitarian response** assumes that timely and sustained funding results in access to basic services for all affected, and cost of response is lower due to advanced procurement and pre-positioning.
3. **A proactive approach to refugee self-reliance and investment in host communities** follows rapidly after the immediate humanitarian response. This could be funded through "pre-positioned" policy architectures, with funding aligned against national development plans.

2.4.3 Analysis of Economics of Alternative Expenditure

It is clear from existing literature that we have little systematic evidence that quantifies the various impacts (financial, social, health etc.) of migration on a refugee, and therefore it is even harder to measure what the change in that impact would be with an alternative response. It is also repeatedly cited that increased self-reliance and host country support has varied effects, and therefore will bring both benefits and costs to different groups in different ways²³.

The evidence that is available on the economics of alternative expenditures for refugee responses in Kenya and Rwanda is used to provide proxy values for alternative response scenarios. In order to assess the economics of alternative expenditures, we evaluate five of the largest and longest running refugee crises globally – namely Afghanistan, Sudan, South Sudan, Democratic Republic of Congo (DRC), and Somalia. Because Sudan and South Sudan were the same country prior to 2011, we combine data for the two countries across all years of analysis. UNHCR data is used to compile historic data on the number of refugees arising from each of these five countries between 1997 and 2017, combined with the average cost per person of humanitarian response based on the humanitarian response plans (HRP) for each country of origin for the most recent year available.

The cost of providing a full humanitarian response to the refugee crises arising out of these five countries, over the last 20 years, is estimated at US\$20 billion (in 2017 dollars). The question then arises – if we were standing back in 1997, and knew that we would spend US\$20 billion over the following two decades on refugees from these five countries, how would we spend that money differently?

- > **Using data from WFP and UNICEF, we estimate that the cost of response could be decreased by a very conservative estimate of US\$1.6 billion through early procurement and pre-positioning.**
- > Using data on the multiplier effects in the local economy of three refugee camps in Rwanda, we estimate that **transfers within a context that is conducive to refugee participation in the local economy would yield benefits to the local economy as well as regional trade of between US\$1.5 billion and US\$4.2 billion.**

The refugee crisis in a host country is, of course, dynamically interlinked with the IDP crisis in the country of origin. A much more robust body of evidence exists that evaluates the economics of preventing conflict in the first place, estimating that every US\$1 spent on preventing a conflict results in US\$16 of benefits.²⁴ Using the same approach to calculate the total humanitarian cost of refugees in the five countries over the last 20 years, we estimate that the cost of providing a full humanitarian response to IDPs is equivalent to US\$19.3 billion, for a total humanitarian cost for all displaced in those five crises of US\$40 billion over the last 20 years.

²³ Fiddian-Qasmiyeh, E., I. Ruiz, C. Vargas-Silva and R. Zetter, 2012, *Assessing the Impacts and Costs of Forced Displacement: Volume 1. A Mixed Methods Approach*, World Bank, Washington, DC.

²⁴ Mueller, H (2017). "How Much is Prevention Worth?". World Bank, Washington, DC. Background paper for United Nations and World Bank. 2018. Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict. Washington, DC: World Bank.

Clearly this analysis provides indicative figures only. It is based on proxy values, but nonetheless uses the best evidence available to provide an overall indication of the magnitude of savings and benefits related to an alternative expenditure profile. This analysis also highlights the potential for new approaches and financing mechanisms for refugee crises - if we were standing back in 1997, and knew that we would spend US\$20 billion over the following two decades on refugees from these five countries, how would we have financed that response differently?

3 FINANCIAL FRAMING

The preparatory analysis was framed through a financial lens to shape discussions and enable the rapid, effective engagement of the wide range of Innovation Lab participants. Five core challenges, presented below, were identified through researching academic literature, existing analysis and engaging with stakeholders with first-hand experiences in the humanitarian/refugee response sector. Evidence and insights around each of these challenges were reviewed in the context of the case studies, and are captured in the 'Case Study Insights' sections presented for each of the challenges.

However, it is important to note that these Case Study Insights are based only on the high-level analyses undertaken to support the Innovation Lab delivery, and are not necessarily representative of how these financing challenges manifest in all refugee crisis contexts. Further exploration of how these financing challenges develop in different refugee crisis settings will be essential in developing relevant financing solutions. Again, this highlights the importance of the development of more suitable data sources to support innovative financing initiatives for refugee crises.

3.1 SPEED CHALLENGE

The needs of refugees materialise rapidly, but it can take significant time for financing to be raised and arrive in-country. Delays include:

- > The time that it takes for responders (including UN humanitarian agencies, host Governments, NGOs and others) to assess needs and create funding appeals, followed by the time that it takes for donors to respond (donor governments have defined budgeting processes and funding release mechanisms).
- > Lack of preparedness by in-country responders to mobilise or scale up their responses. Without a guarantee of funding, responders are not incentivised to invest pre-emptively in supplies, staff or physical infrastructure, even though pre-emptive and early action is likely to be far cheaper overall than a slower or more ad hoc response.

Case Study Insights

The three country case studies, which were all high magnitude and very visible crises, did not themselves reveal evidence of a speed challenge (i.e. any significant mismatch between rapidly emerging needs and the arrival of donor pledges). Contingency mechanisms (for example the Central Emergency Response Fund (CERF), and through UNHCR, World Food Programme (WFP) and International Organization for Migration (IOM), as well as bi-lateral donor mechanisms) typically resulted in initial funding arriving very quickly, covering the gap until larger tranches of funding could be approved.

However, there is a general concern from the stakeholders consulted that smaller and less visible crises do suffer from a lack of funding at the outset and find it harder to mobilise and maintain funding throughout the response. Additionally, other larger-scale crises that were outside the scope of this study may also face the speed financing challenge to varying degrees.

Framing Questions

- > How to increase the speed and reliability with which financing is made available to delivery organisations/implementing agencies in smaller, less visible responses as well as large, high profile ones?
- > How to offer sufficient confidence in funding to responders that they invest upfront in the (often more efficient and cheaper) pre-positioning of goods, staff etc. At the same time, how to ensure that confidence does not lead to unnecessary responses and/or remove the incentives for well-tailored, needs-driven responses in dynamic environments - one size/approach won't fit all.
- > How does the design of financing solutions differ between large-scale crises, and smaller and less visible crises where it may be harder to track and pre-determine influxes of refugees, and the total size of funding required is smaller?

3.2 DURATION CHALLENGE

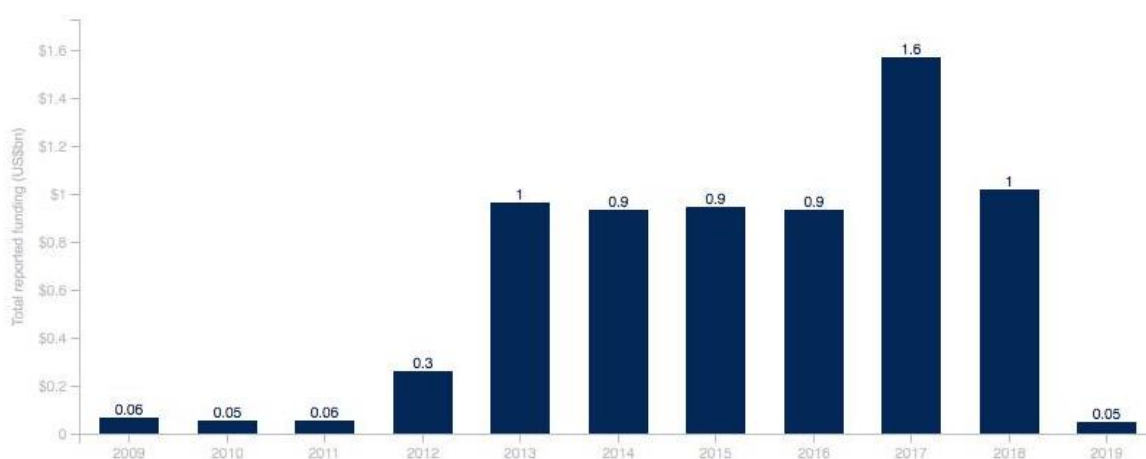
The duration challenge has several different dimensions. With 80% of crises lasting for 10 years or more, the duration of available funding is a particular challenge. Any initial success in response can be undermined if funding is cut or runs out too soon. Impacts may include further displacement (refugees feeling they need to move on to meet their needs), forced asset sales, reductions in food rations, increased childhood marriage, children withdrawn from school, health deterioration and malnutrition.

Equally, a significant proportion of refugee funding is allocated on a short-term or annual basis. This means that commitments cannot be made to programmes of a longer duration that, if implemented, have the potential to produce better results or a more efficient use of funds.

Case Study Insights

Despite Jordan remaining a high-profile response, the Jordan case study indicates the beginning of a tailing-off in funds over time, with a significant drop in reported funding from 2017 to 2018. The Bangladesh refugee crisis is only a year in and therefore it is too soon to be able to see the duration challenge in the data. Kenya has such a mixture of different crises at different times, so new needs were often addressed alongside older needs. Nonetheless, the duration challenge is a key challenge for increasingly longer-term crises that requires addressing.

Figure 1 - Jordan: Trends in Total Reported Funding for all Humanitarian Assistance, 2009-2019, US\$ Billion²⁵



²⁵ <https://fts.unocha.org/countries/114/summary/2018>

Framing Questions

- > How to better sustain the supply of funds to match the long-term financing requirements of refugee crises?
- > How to better match financing with programmes that require upfront/early long-term commitments?

3.3 SHAPE CHALLENGE

The shape challenge relates to the use of funds and types of investments made in responding to refugee crises. Whilst data is extremely limited, there have been a number of success stories of responses that go beyond the provision of absolute basic humanitarian requirements to refugees. These are interventions with the ability to influence the impact of refugee funding and could include:

- > Integration of the refugee population to the host country work force;
- > Access to education and other basic services; and
- > Funding to domestic property owners to allow construction (discussed below).

Case Study Insights

The case studies highlight a variety of examples that demonstrate how provision beyond basic humanitarian requirements can yield significant benefits. For example, a study of Kakuma refugee camp in Northern Kenya found that investing in economic integration of refugees (in this case, defined as granting legal permits to live and work anywhere in Kenya), as compared with full encampment, increased per-capita regional host incomes by a non-trivial 6%. In Jordan, the Norwegian Refugee Council (NRC) gave conditional cash grants to Jordanian property owners to complete unfinished buildings, with the requirement that they give refugees priority housing in those units. Analysis is anecdotal at best, but innovations that go beyond providing basic requirements in camp settings are greatly needed, as highlighted by the Economics of Alternative Expenditure analysis.

Framing Questions

- > How can the private sector, public sector or donors provide additional funding to support innovative refugee funding/policies?
- > How can financing mechanisms be used to support more long-term actions that seek to promote refugee self-reliance (and reduce longer term humanitarian assistance budgets)?

3.4 HOST COUNTRY CHALLENGE

Some 85% of refugees are hosted in developing regions, and one third of all refugees in the world's least developed countries, which puts a strain on host country resources. Host countries need to be able to finance the additional costs associated with the provision of services (e.g. education, health) and infrastructure requirements (e.g. schools, housing, hospitals) for refugees. At the same time, they need to manage competing priorities and possible tensions with host areas, which may also be facing pre-existing development challenges and/or resource constraints.

Existing public support mechanisms available to host countries include:

- > UNHCR – 2017 expenditure was US\$4bn;
- > IDA18²⁶ (International Development Association) Regional Sub-window for refugees provides US\$2bn of funding for low income countries;
- > GCFF²⁷ (Global Concessional Finance Facility) provides concessional financing for middle-income countries.

²⁶ IDA18: <https://ida.worldbank.org/financing/replenishments/ida18-overview/ida18-regional-sub-window-for-refugees-host-communities>

²⁷ GCFF: <https://globalcff.org>

Case Study Insights

An interesting example is the recent US\$200mn investment funded by the Asian Development Bank in Bangladesh, to develop the water, sanitation, transport and telecoms infrastructure in a refugee hosting area. This investment brings benefits to both local and refugee populations and has the potential to save money in the long term.

Framing Questions

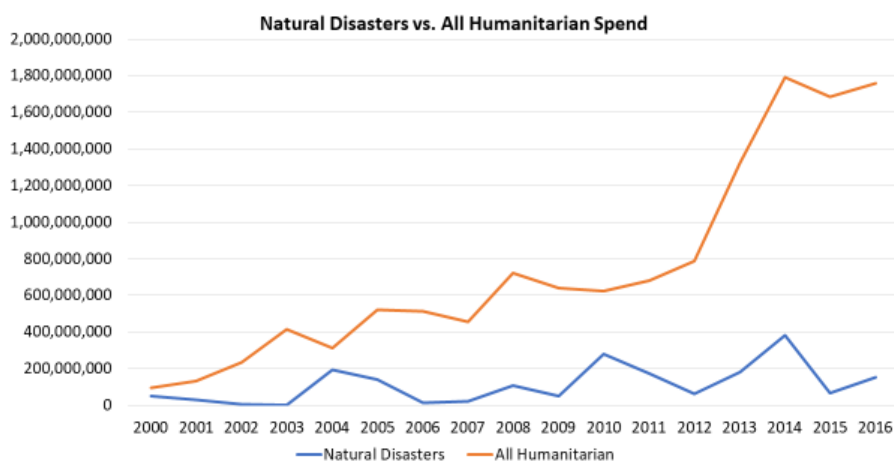
- > How to enable host countries to finance the increased costs associated with hosting third country refugees? Can the costs of credit and transactions be reduced to reflect the humanitarian and public good for the work being funded?
- > What would an ideal “win-win” financing option look like to both hosts and refugees? Can we shift to an outcome-based approach that qualifies the benefits for both hosts and refugees?

3.5 GLOBAL CHALLENGE

At the global level, the frequency and severity of mass refugee flows vary from year to year, as do other humanitarian crises (i.e. natural disasters). This presents significant budget challenges to donor governments and tests the generosity of public donations. These challenges are becoming increasingly difficult to manage as overall humanitarian demands continue to increase, largely driven by growing needs from man-made crises. As an example, UK humanitarian spending (total compared to natural disaster spend) from 2000-2016 is shown below.

Figure 2 - UK Humanitarian Spend, 2000-2016²⁸

**Total UK humanitarian spend has increased significantly since 2000.
A relatively small portion of that is due to natural disasters,
most of growth is in response to growing needs from man-made crises.**



Framing Question

- > How to ensure that sufficient funding is available to support refugee crises even during high frequency/severity years, and in the face of multiple competing demands on humanitarian budgets?

²⁸ Ranger N, DFID, based on data from OCHA FTS, 2018

4 INNOVATIVE FINANCE

Innovative finance seeks to develop and/or apply non-traditional mechanisms to meet humanitarian or development financing needs – often this means the adaptation of capital and insurance market instruments to new contexts, creating access to greater levels of funding from a more diverse range of sources (including private sector investment), enabling better risk management, providing greater reliability to funding in terms of delivery, timing, and duration, and better incentivising results. Innovative finance is increasingly recognised as being essential for sustainable development²⁹, and there has been a surge in innovative financing across the development and humanitarian sectors. This increase in innovative finance has been further galvanised by innovations in technologies required to design effective interventions, such as mobile and satellite tracking systems.

While innovative financing approaches for refugee response are still somewhat limited, many lessons can be drawn from innovations in other sectors, particularly the health and natural disaster sectors. Below is an overview of such innovative financing examples, as well as an example of a technological innovation to support innovative financing.

4.1 INNOVATIVE FINANCE IN OTHER DEVELOPMENT AND HUMANITARIAN CONTEXTS

Parametric Insurance for natural disasters, such as the African Risk Capacity (ARC), Caribbean Catastrophe Risk Insurance Facility (CCRIF), Pacific Catastrophe Risk Insurance Facility (PCRIF); and the World Bank Pandemic Emergency Financing Facility (PEF). These are multi-country insurance pools, enabling the diversification of risk and so reducing the cost of insurance. They are also parametric, with pay out directly linked to a predetermined parametric/index-based trigger. If this trigger is exceeded, funds are released automatically without any need to undertake loss adjustment or indemnity calculations. This means that funding can arrive quickly and reduces the risks of moral hazard. However, index-based insurance is susceptible to basis risk. i.e. the pay-out could be significantly different (either lower, or higher) from what is required. Index-based instruments require sufficient risk data to structure the policies.³⁰

Forecast Based Financing for disaster relief, such as the International Federation of Red Cross and Red Crescent Societies (IFRC) Disaster Relief Emergency Fund. This mechanism automatically releases funds before a disaster strikes, based on forecast information. This enables the rapid implementation of pre-planned activities and,

Development Response to Displacement Impacts Project (DR DIP)

DR DIP is a \$US250mn World Bank investment into a Displacement Crisis Response Mechanism in Uganda.

The mechanism focuses on prevention through inclusion, by disbursing to scale up service provision in refugee and host communities, in response to horizontal inequality of access to services affected by displacement. The disbursement is triggered by objective displacement data and a rules-based process, based on levels of need in host and refugee communities. Resources are then delivered through a pre-established system of community-based investment projects. This approach improves the time-sensitivity, government ownership and accountability of response to displacement, enables greater management of the social risks of displacement, and saves on the overall cost of responding to violence by lowering its risk of onset.

Source: Chris Mahony, World Bank, New York Innovation Lab Presentation, 2018

²⁹ United Nations, The Secretary-General's Strategy for Financing the 2030 Agenda for Sustainable Development (2018-2021), 2017, https://www.un.org/sustainabledevelopment/wp-content/uploads/2018/09/SG-Financing-Strategy_Sep2018.pdf

³⁰ DFID, Innovations in Humanitarian Funding and Financing Presentation, 2018

potentially, impact mitigation. Again, forecast-based financing requires sufficient data to be able to accurately forecast events and trigger the release of funds.

Social and Development Impact Bonds, such as the International Committee of the Red Cross (ICRC)

Event Based Monitoring

The Internal Displacement Monitoring Centre's (IDMC) Internal Displacement Event Tagging Extraction and Clustering Tool (IDETECT) reads and filters world news and UN and NGO reports, analysing the relevant texts to extract key information including type, cause, and location of displacement, as well as number of people affected and reporting units and terms. These outputs are reviewed by monitoring experts to validate or correct them, and as a supervised machine learning tool, IDETECT 'learns' and improves through this process. The IDMC displacement monitoring platform then draws data from a range of sources, including the IDETECT outputs from media, hazard monitoring, conflict events, social media, satellite imagery and others, and the real-time platform visualises this range of information to monitor displacement events around the world. New technologies such as these improve the availability and quality of data on displacement, enabling a more effective response to displacement events.

Source: Leonardo Milano, Internal Displacement Monitoring Centre, New York Innovation Lab Presentation, 2018; IDMC, Monitoring Platform: How IDMC Monitors, 2018, <http://www.internal-displacement.org/monitoring-tools/monitoring-platform>

Humanitarian Impact Bond. These instruments attract upfront capital from investors for the delivery of a programme by an implementing organisation. The programme results are assessed against specific, pre-determined measures of success. If the required results have been achieved, the investors are repaid capital plus interest by the Government (in the case of Social Impact Bonds), or an aid agency (in the case of Development Impact Bonds). If the programme has failed to achieve the required results, the investor receives no interest and loses part of the capital investment.³¹ These 'performance based' instruments enable risk management as well as incentivise desired outcomes and can attract a range of investors. The ability to accurately measure programme impact is essential to Social and Development Impact Bonds, and so is only applicable to specific types of interventions.

4.2 INNOVATIVE FINANCE IN THE REFUGEE ASSISTANCE CONTEXT

It is evident that the nature of global refugee crises is becoming increasingly complex – growing in scale, duration, and impact across multiple concurrent refugee crises. As approaches to supporting refugee crises begin to adapt – as demonstrated by the adoption of the GCR – so approaches to funding must also adapt. Indeed, the success of the GCR and broader humanitarian and development support to refugee crises will be dependent on new funding approaches – funding that is more efficient, effective, equitable and sustainable. As discussed in Section 3, the funding of refugee crises is inherently challenging, with a number of political-economy, technical and market-based factors to consider. Current approaches to funding have proven to be inadequate, with responses notably underfunded, inefficiently allocated, and unsustainable.

As such, innovative finance that is not only able to unlock additional funding, but more importantly able to better match the timing, duration, shape, incentives and results of the finance, provides enormous opportunity to improve the funding of refugee crises. Despite the challenges of financing for refugee crises, the examples of approaches developed for other contexts given above have also overcome many of the same challenges, particularly in terms of imperfect data, underdeveloped markets, and political factors. Innovations in data collection and analysis, an increasing appetite for innovative financing, and the growing awareness of the need

³¹ UNDP, Social and Development Impact Bonds, <http://www.undp.org/content/sdfinance/en/home/solutions/social-development-impact-bonds.html>

for new ways of funding refugee crises mean that there is enormous potential for the development of this sector.

Some promising mechanisms are already starting to deliver in this space, including the US\$2bn IDA regional sub-window for refugees, which provides highly concessional finance to host country governments intended to incentivise work that supports both refugees and host communities; and the Global Concessional Financing Facility, coordinated and implemented by the World Bank, which delivers concessional finance specifically to middle-income countries hosting large refugee numbers. The GCR also proposes regular UN Global Refugee Forums every four years from 2019, to galvanise broader support to refugees - including securing new funding commitments, as well as considering resettlement and wider policy shifts³².

4.3 CHARACTERISTICS OF INNOVATIVE FINANCIAL INSTRUMENTS

There are a wide range of variable characteristics to be considered in the development of innovative financial instruments. In the complex context of financing for refugee crises, these characteristics can effectively be 'mixed and matched' to develop a range of financial instruments, in response to a wide range of financing needs. Some of the key factors to consider in the development of innovative financial instruments for refugee crises are outlined below. A wide range of these structural characteristics were considered by Innovation Lab participants in their development of innovative financing instruments for refugee crises and are discussed further in the context of the specific solutions proposed at the Innovation Lab, set out at Section 5.

4.3.1 The Role of Risk Transfer Mechanisms

Given the inherent instability and politically challenging nature of refugee crises, risk-based approaches to financing that involve the transfer of risks between two or more parties are of particular interest. Ex-ante, risk-transfer mechanisms, as highlighted in Figure 3 below, enable the management of risk, and as they are pre-arranged can also enable a more reliable, rapid release of funding. With the appropriate supporting data and instrument structuring, these types of solutions, including insurance, index-linked insurance, and capital market instruments, have the potential to respond to many of the challenges currently faced in the financing of refugee crises, and can be tailored to a range of specific financing requirements. Ex-ante, risk-retention mechanisms such as contingent credit are also of interest in the context of financing refugee crises, as they are also arranged before a potential crisis and so enable the faster and more reliable release of funding. More traditional ex-post mechanisms such as post-crisis credit and discretionary post-crisis aid are often prone to the challenges discussed in Section 3, including insufficient levels of funding, the delayed arrival of funding, and inefficient use of funding, and are not considered further in this report.

Figure 3 - Instruments for Financing Disaster Risk³³

	Ex ante <i>Arranged before a crisis</i>	Ex post <i>Arranged after a crisis</i>
Risk Retention <i>Changes how or when one pays</i>	<ul style="list-style-type: none"> Contingency fund or budget allocation Line of contingent credit 	<ul style="list-style-type: none"> Budget reallocation Tax increase Post-crisis credit
Risk Transfer <i>Removing risk from donor balance sheet</i>	<ul style="list-style-type: none"> Traditional (re)insurance Indexed insurance, reinsurance, or derivatives Capital market instruments 	<ul style="list-style-type: none"> Discretionary post-crisis aid

³² United Nations, General Assembly, Report of the United Nations High Commissioner for Refugees - Part II Global compact on refugees, A/73/12 (Part II), 13 September 2018), https://www.unhcr.org/gcr/GCR_English.pdf

³³ Clarke, D. J., & Dercon, S., 2016, *Dull Disasters?*, New York, Oxford University Press

4.3.2 Triggers

The release of funds can be 'triggered', either by a 'hard' trigger such as a quantified measure or index, or a 'soft' trigger such as the declaration of a state of emergency by a Government. The structure of specific triggers and the amount of principal at risk (i.e. the amount that can be lost) will have a significant impact on the instrument type.

Some of the trigger options most relevant to funding refugee assistance include:

Parametric Triggers, which are tripped by a specified quantitative severity of an event. If the trigger is exceeded, funds are released automatically without the need for loss adjustment or indemnity calculations (which can take time and delay the release of funding). As such, parametric triggers are highly relevant to the refugee financing context, as they enable a more rapid, reliable release of funding. Parametric triggers are also useful in that they reduce the risk of moral hazard (i.e. where one party gets involved in an event that it would not otherwise do, because it knows it is protected from any potential downside), however are prone to basis risk (i.e. the actual pay-out could be significantly different from what is required). As such, the effective structure of parametric instruments requires independent and verifiable parametric triggers, and so require sufficient risk data. Specific parameters can be very diverse, provided that they are robust, and can include the strength of a natural disaster event, the number of people affected, and can also include multiple triggers simultaneously in a single transaction. For example, in the refugee finance context, the parametric triggers for an instrument could be 250,000 refugees in 4 or more countries simultaneously. Parametric instruments have become increasingly popular, particularly following their successful implementation in multi-country natural disaster insurance pools such as ARC, CCRIF, PCRIF and PEF (see Section 4.1).

Triggers can be observed or modelled - if specific losses are unknown or cannot be determined, then an agreed model can be used to determine the pay-out. Industry examples of modelled instruments included Industry Loss Warranties (ILWs) and Weather Index Instruments. The ongoing development of technologies to predict, monitor and model refugee flows will increase the potential to apply these to refugee finance. However, such models are relatively nascent at present.

Indemnity Triggers, which are tripped based on the losses incurred by the cedent (i.e. reinsured) or issuer of the instrument exceeding a specified amount following an agreed event. Indemnity triggers reduce the risk of basis risk, however post-event indemnity calculations can be time-consuming and delay the release of funding. An industry example of an indemnity instrument is Excess of Loss (XOL) reinsurance. In the refugee financing context, an indemnity instrument could be structured that is triggered once existing prearranged funding sources have been exhausted. This additional layer of finance would 'sit above' or be 'in excess of' the existing schemes. Similar to high excess level insurance or super senior investment tranches, such a mechanism has the potential to attract contributions from other donor countries who may only be willing or able to contribute in extreme scenarios.

Industry Triggers, which are tripped by claims on an entire industry for a specified event, or can be sub-limited, for example, to losses in a specific geographical region. This trigger is less relevant to refugee finance since there is no 'refugee industry' and is therefore only included here for completeness.

4.3.3 Risk Profiles

The risk profile of an instrument is based on the probability and severity of the instrument paying out, which is driven by the underlying characteristics of the risk faced. As this will impact both the cost of the instrument and the investors and underwriters that are likely to be willing to participate, this is an important factor in the development of financing instruments for refugee assistance. High-cost instruments, whether in absolute terms or relative to the level of risk coverage provided, may preclude affected parties from purchasing an instrument, and high-risk instruments or first-loss positions may not be able to attract the desired types of investor or level of investment. In particular, highly correlated events or risks are unattractive to investors and underwriters, and will attract an increasingly limited range of investment options.

Risk Pools enable multiple parties (in the refugee financing context – likely governments in an affected region) to pool their risk exposure, improving the diversification of the instrument as it becomes exceedingly unlikely to have an event that would cause total loss to the whole pool, and therefore reducing the relative cost of the instrument. Examples of risk pools include ARC, CCRIF and PCRIF discussed in Section 4.1, where governments within regions were able to collaborate and pool their natural disaster-related risk to purchase parametric insurance at a reduced individual cost. When considering the structure of a risk pool, it is essential to ensure that any assumed diversification is real, and not perceived, as occurred in the 2008 financial crisis.

Risk Layering enables the combination of risk retention and risk transfer instruments to better manage the risk profile of an instrument or portfolio. An example of this is the '**priority of payment**' illustrated in the Humanitarian Blended Bond Collateralised Debt Obligation (CDO) (see Solution 3). If the probability of incurring a loss is very high, then it is unlikely to be commercially viable and public capital may be needed to assume this first-loss position. Higher tranches of the same instrument may then have a more suitable risk profile to attract private sector investment.

Credit Guarantees (see Section 5.4) are another option to manage the risk profile of lending, by effectively protecting a lender from default by a borrower. For example, a donor offering a guarantee on a host countries' debt improves the risk profile of this lending, which could then attract new private sector capital.

4.3.4 Regulatory Frameworks

Financial regulation is an important consideration when designing a new instrument. It determines not only which regulator must be engaged with, but also which investor types are able to be attracted and where the instrument can be issued.

International insurance and reinsurance companies are typically able to participate in both insurance and capital market type structures, such as Impact and Catastrophe Bonds, whereas capital market investors rarely carry the necessary regulatory permissions to act as insurers. Domestic insurers and reinsurers in developing countries would not typically participate in capital market instruments beyond their normal financing operations. This may be due to a lack of internal capacity or enabling domestic regulations. Nonetheless, the size of the international capital markets, which includes the insurance industry as well as other institutional investors, means that this pool of potential capital providers is very deep.

An exogenous factor to also consider is the geographic regulatory regime under which the instrument will be covered, as not all regulatory regimes will be fully established in all geographies. The insurance market is a long-established industry and as such, virtually all countries around the world have established regulatory regimes and regulators that cover insurance transactions. However, the markets for Catastrophe Bonds and more exotic instruments are less well established and consequently, domestic regulatory regimes and regulators are less likely to be sufficiently robust for these types of instruments to be issued in all jurisdictions.

4.3.5 Funding Mechanisms

The source of funding for instruments is an important consideration, particularly in the context of an already strained humanitarian system in response to refugee crises. One idea that arose at the Innovation Lab was for the establishment of a new revolving or pooled fund, that could be made up of small contributions (in the form of a tax or levy) from all UN members, or all signatories to the GCR. This differs from the voluntary nature of UNHCR contributions and would have the benefit of more equitably sharing the currently highly concentrated sources of funding for refugee crises, however it is important to note that such a tax or levy would need to be agreed to by member states or supporting countries. Such a fund could be structured to disburse in a number of different ways, such as through a parametric trigger, or a set of eligibility conditions.

The decision for governments to access private sector capital or assume the risk themselves is also important. For example, while some governments are typically not large buyers of insurance, as they are able to more effectively pool and spread risks as well as raise taxation to cover losses, there are instances where using public capital to purchase insurance could be appropriate. This could be particularly suitable for countries with budgetary constraints or with limited ability to increase taxation, where the use of public funds to pay an

insurance premium could be a more efficient use of public funds. As the cost of the premium is typically a fraction of the total exposure (e.g. the premium for parametric insurance could be \$10mn, but easily purchase a coverage limit of \$100mn or more) purchasing insurance can be a way to smooth costs to governments or donors (as discussed further in Section 5.1). Whether the purchase of an instrument is the most effective use of public funds would also depend on an assessment of total costs versus likely benefits over the life of the instrument – considering the costs of capital, additional management, and the likelihood of losses covered by the instrument.

5 INNOVATION LAB OUTCOMES AND OPPORTUNITIES FOR FINANCIAL INSTRUMENT INNOVATION

The objective of the Innovation Lab was for participants to develop specific, actionable, innovative financing solutions, in response to the financing challenges of refugee assistance detailed in Section 3.

While developing potential financial solutions to these challenges, Innovation Lab participants were asked to consider the following:

- > **Who is providing and who is receiving the funds?** Is it a donor or host country, NGO or other party? Which financing options might be more appropriate for which donors or recipients?
- > **What is the finance used for?** Is it for the basic provision of food and shelter, or is it for education or employment integration? While the former cover fundamental needs, the latter may generate additional benefits that could potentially be captured and/or monetised in some form, possibly enabling pay back.
- > **What benefits does the finance generate? For whom?** The term 'benefits' needs to be used cautiously. As noted above, much of the funding is used to provide basic essentials which cannot (and should not) generate 'benefits' that could be captured by anyone other than the refugee.
- > **What is the monetary size of the problem?** This is relevant as it impacts on where you may turn to for the financing. For example, \$10 million to create a property fund to lend to host country nations to complete house building (e.g. the Jordan Integrated Urban Shelter programme) is very different from a Government borrowing \$100 million to cover the costs of hosting refugees.
- > **Over what period is the financing provided?** How can financing support 1, 10 or 25-year responses, particularly when the ultimate duration of the response won't be known at the outset?

The sections below consider the solutions developed in the Innovation Lab, structured according to type and considered within the context of the wider range of options and their characteristics reviewed at Section 4. Each of the proposed instruments is summarised in a table setting out key features with further narrative discussion on those features, and on feasibility and recommendations for further development. Where groups had proposed similar solutions, these have been combined. Additional financial instruments, some of which were discussed at the Innovation Lab although not proposed as detailed solutions, are also considered in each category, as they represent potentially viable options for further development.

It is important to note that the proposals identified below were developed in intensive, one-day events, as part of a creative endeavour to imagine a broad range of options to structure new, innovative financial instruments. As such, they are not an exhaustive set of options, but instead are high-level ideas that would require significant additional efforts to test the validity of the concepts and efficacy of the ideas, and they are a long way from being fully formed or transaction-ready. Also, several of the ideas proposed would more appropriately be considered as 'programmes' to support refugees, rather than 'financing solutions'. While these programmes are outside the original scope of the Innovation Lab, they are nonetheless valuable ideas that should not be lost and as such have been included in full in Annex 9.

5.1 INSURANCE AND INSURANCE LINKED SECURITIES

While initially proposed at the Innovation Lab as catastrophe bond instruments, both Solutions 1 (Global Refugee Finance Catastrophe Bond) and 2 (Humanitarian Catastrophe Bond) detailed below are in fact 'parametric instruments' that could be financed through a catastrophe bond *or* parametric insurance. Some points of note in relation to each of these two types of financing instrument are set out below:

5.1.1 Parametric Insurance

Parametric insurance was frequently noted at the Innovation Lab for its potential to improve the speed of response (as an instrument established ex ante, with automatic disbursement), reliability of funding (due to rules-based, objective triggers) enabling pre-planning and pre-positioning, the management of risk (as a risk-transfer instrument – see Figure 3), and to reduce the cost of response for both donors and host countries (by paying lower-cost premiums for higher-value coverage, and potentially also by enabling a more effective, earlier response). Parametric insurance can be purchased as part of a risk pool, as discussed in Section 4.3.3, but can also be purchased as individual policies (although it would be important to consider the risk profile/instrument cost trade off in this instance). Given the now significant experience of donors, recipient governments and responders in structuring regional disaster risk parametric insurance pools, including ARC, CCRIF and PCRIF, parametric insurance lends itself strongly to further application in the refugee financing context.

5.1.2 Catastrophe Bonds

Catastrophe bonds (cat bonds) are a type of instrument whereby investors take on the risks of a specified catastrophe or event occurring in return for attractive rates of investment. Should a qualifying catastrophe or event occur the investors will lose the principal they invested and the issuer (often insurance or reinsurance companies) will receive that money to cover their losses. This is an example of insurance securitisation, to create risk-linked securities which transfer a specific set of risks (generally catastrophe and natural disaster risks) from an issuer or sponsor of the cat bond to investors.

With the cat bond market estimated to be US\$30bn in 2017³⁴, this source of financing offers an important potential source of capital for refugee finance. Furthermore, even where the risk profile might not suit commercial private sector investors, some of the structures and methodologies from this market can be adapted to design relevant financing instruments for refugee response, drawing on other sources of capital. Similar to parametric insurance, the ex-ante, risk transfer structure of cat bonds makes them highly relevant to refugee financing, enabling rapid, reliable, and cost-effective funding for response.

Two solutions were developed within this area during the Innovation Lab, as set out below:

Solution #1

Challenge	Global Challenge
Solution Name	Global Refugee Finance Catastrophe Bond
Solution Summary	A Catastrophe Bond triggered by a high severity event to ensure enough capital is available to close the gap between the need and what is available when multiple crises occur.
Who	<ul style="list-style-type: none"> • World Bank • Donor Governments • Re/insurance industry
Why	<ul style="list-style-type: none"> • Ensures refugees' needs are met even in high frequency/severity years.

³⁴ Aon, 2018, <http://thoughtleadership.aonbenfield.com/Documents/20180905-securities-ils-annual-report.pdf>

	<ul style="list-style-type: none"> • Realigns incentives for better prevention. • Brings new source of private capital. • Gives donor governments greater budget certainty.
How	<ul style="list-style-type: none"> • Who Pays: Paid for by Donor Governments or investors in host countries or neighboring countries. • Receivers: Host countries &/or implementing agencies. • Where does it sit: World Bank/Private sector re/insurers.
Details	<ul style="list-style-type: none"> • Identify potential funders e.g. host country investors. • Test feasibility of longer-term commitments from donors and investors. • Engage World Bank. • Define the triggers. • Engage re/insurance industry.
Metrics	<ul style="list-style-type: none"> • Inflow or outflow of refugees, >250,000 refugees. • Number of countries affected, 4 or more. • Speed of instrument payout.
Comments	<ul style="list-style-type: none"> • Designed to cover high severity scenarios involving multiple countries and large refugee flows. • Reasonable frequency/severity data already available from UNHCR covering 64 years' experience. However, given the changing nature of refugee crises, reliance on historical data is less likely to accurately predict future high frequency/severity scenarios.

Solution #2

Challenge	Speed Challenge
Solution Name	[Humanitarian] Catastrophe Bond
Solution Summary	An ex-ante market-based insurance product for managing emergency liquidity.
Who	<ul style="list-style-type: none"> • Funded by a blend of donor and institutional investors' capital • Beneficiaries will be dependent on the crisis but could be host country governments; regional governments or independent NGO/implementing agency.
Why	<ul style="list-style-type: none"> • The quality of action at the onset of the crisis is important. • There is a high cost of inaction on resilience front. • Lack of long-term predictable financing early on for resilience approach from the outset.
How	<ul style="list-style-type: none"> • Managed by a public/private trust fund.
Details	<ul style="list-style-type: none"> • High attachment point, large payout. • To be a counterparty to the contract, neighbouring states must pre-commit to specific, measurable, and mutually-observed policy measures if an inflow happens, like enabling refugee children to access public education and allowing refugees to work. • Triggers linked to: <ul style="list-style-type: none"> • Refugee inflows >100,000.

	<ul style="list-style-type: none"> • Duration. • Pre-commitments for policy change e.g. granting refugee work permits, access to education. • Payment to the counterparty would be linked to these targets being met. • Stakeholders to include: <ul style="list-style-type: none"> • Private sector re/insurers and capital markets. • Donor governments – premium payment. • Host Countries – pre-agree measurable policy measures. • Humanitarian actors. • Refugees. • Where host countries are not well-placed to deliver services, independent NGO/implementing agencies may be used. • May be linked to suite of parallel instruments: pre-agreed concessional lending to assist with work 'above the attachment point' and side contracts pre-agreed with investment funds and private sector partners that capitalise on work opportunities for refugees created by the policy commitment to giving them work permits.
Metrics	<ul style="list-style-type: none"> • Pre-commitment to specific, measurable, and mutually-observed policy measures. • As above for cat bond.
Comments	<ul style="list-style-type: none"> • Design will help to incentivise good practice, better data collection and contingency planning.

The two instruments identified above (which could in fact be considered in the context of Cat Bonds or Parametric Insurance) are fundamentally similar, however they address very different requirements. The Humanitarian Catastrophe Bond (HCB) is designed to cover 'liquidity' and enable rapid deployment of funds. Whereas the Global Refugee Finance Cat Bond (GRF) is designed to cover 'severity' and ensure sufficient finance is available even in time of exceptionally high refugee finance demands. As such, they will attract very different capital providers, donors and implementing partners.

Both these instruments use parametric triggers (see Section 4.3.2) related to refugee flows, albeit at different levels of severity. Since events leading to refugee flows (inwards or out of countries) of 100,000 or more have occurred in 70% of years since 1965, it is unlikely that the HCB would allow for significant risk transfer to private sector capital. As commercial insurance markets specialise in low probability events, an event that occurs in 70% of years would not fit this risk profile and would amount to 'dollar swapping' i.e. the premium charged having to be high and would almost certainly be being paid directly back to the insured. However, it may be possible to structure a bond with very low risk transfer, making this more of a risk financing instrument³⁵. This would help smooth funding demands on donor governments and implementing agencies. It would also provide certainty to host countries, implementing agencies and refugees themselves that funding will be available, and therefore is a highly attractive instrument (especially to donors to smooth volatile budgets).

The Global Refugee Finance Cat Bond on the other hand has significant potential for risk transfer to the private re/insurance sector, as addressing low probability/high severity events is in line with the risk appetite of this market sector. Importantly, this instrument recognises that refugees' needs do not become any less because

³⁵ Instruments with high degree of risk transfer mean the underwriter of the instrument retains/assumes the risk in the event of a loss. Risk finance instruments on the other hand ultimately see the underwriter largely paid back after a loss. This may be over an extended period. Risk finance instruments are most useful to smooth unpredictable financing demands. The more they risk transfer they higher the cost of the instrument.

there are more refugees. Therefore, sufficient funding needs to be available even in years of extremely high refugee flows. The global case study (Annex 5) notes that according to UNHCR data, the frequency of events that involve the outflow of more than 250,000 refugees impacting 4 or more countries only happened in 5% of the years since 1952.

As discussed in Section 4.3.3, both of these instrument types enable multiple parties (in the refugee financing context – likely governments in an affected region, or responders such as the UN or NGOs) to pool their risk, improving the diversification of the instrument and in turn reducing the cost of an instrument relative to exposure. Specific risk pool structures discussed at the Innovation Lab included both regional and global risk pools, as well as a risk pool arranged by a refugee source country (e.g. identified by a certain threshold of IDPs, that could potentially progress to cross-border refugee flows), for the coverage of a 'halo' of neighbouring potential host countries.

Both instrument proposals recognise that refugees need access to long-term, durable solutions that give them market access (such as providing employment permissions) and access to state services (such as access to education). The challenge is bringing a large amount of funding to bear for responders and/or host countries within a tight timeframe in exchange for verifiable and meaningful policy commitments like granting refugees work permits. To earn the buy-in of host communities, it is necessary to scale up funding while providing certainty of commitment (so that donors cannot renege), and link disbursement to clear, pre-agreed policy indicators. This pre-positions enough money to make a difference today, saving money down the road. That is good for donors, good for host communities, and good for refugees themselves. These instruments effectively bring political decisions forward to be taken at a time when a crisis is not underway. It uses innovations from the private sector cat bond market to link funding to pre-defined events and conditions. It is important to note that the selection and definition of triggers will be crucial, as any trigger linked to human-made events and related to violence or conflict needs to be carefully considered in light of potential moral hazard.

5.1.3 Recommendations

For any Cat Bond or Parametric Insurance to be effective, it is necessary to have well defined triggers that are independent and verifiable. They should not be capable of being manipulated nor should they incentivise any change in behaviour i.e. introduce moral hazard.

New technology has the potential to improve the definition of relevant triggers for refugee related cat bonds. For instance, there are several technologies being developed to track refugee flows (see Annex 7), including satellite data; news monitoring (providing early warning of conflict, and also reporting on movements of people); and tracking of mobile phone activity. These data sets need to be accurate; independent; rapid/frequently reported and consistent. They also need to respect the privacy of the individual. Gathering such data also allows the opportunity for early identification or forecasting of significant displacement events, allowing for pre-positioning of goods, services and policies (improving the speed of response upon the arrival of refugees, and enabling a more cost-efficient response overall).

The development of the markets for refugee parametric insurance and refugee catastrophe bonds could be supported by the capitalisation of insurance pools, subsidisation of premiums and/or subsidisation of catastrophe bond principal amounts by donors, which in turn could also open up this market to broader types of investors. Such initial support could be funded by individual donors, or the UN-member pooled fund discussed earlier, for example.

A pilot to explore this option should include:

- > Further analysis of available data to identify suitable, independent and verifiable triggers for a humanitarian cat bond and/or parametric insurance.
- > Detailed review of technology solutions to support potential parametric triggers identified above.
- > Engagement with donor governments and philanthropic foundations to support HCB type 'liquidity' cat bond.
- > Engagement with commercial re/insurance sector to support GRF type 'severity' cat bond.
- > Engagement with relevant governments and/or responders to support the development of risk pools.

5.2 OTHER SECURITISED INSTRUMENTS

One proposal generated at the Innovation Lab tackled issues that are common when developing products aimed at bringing in private sector capital: 1) How do you make small assets, such as small-scale infrastructure or loans to entrepreneurs, large enough to be attractive and of the scale necessary to attract large flows of private capital? 2) Is there a way to effectively reduce risk to encourage commercial investors to invest in a novel asset or region outside of their comfort zone? The answer: create a securitised product.

Securitised products generally take small loans or assets (e.g. credit cards, mortgages, or car loans), pool them together and then structure risk in layers. By doing this, this financing structure takes a small asset and makes it a large, investable vehicle and tailors the risk to the investor appetite. Those getting the highest priority, but generally lowest returns, are effectively taking the least risk.

As host countries' resources are stretched by increasing refugee populations, there also becomes a need to increase spending on infrastructure. This however is neither fiscally nor politically possible for many countries to fund on their own. With donor capital also scarce, there is an increasing urgency to engage the private sector, which the below solution aims to address:

Solution #3

Challenge	Host Country Challenge
Solution Name	Humanitarian Blended Bond
Solution Summary	Collateralised Debt Obligation (CDO) structure to support infrastructure investment in water, sanitation and hygiene (WASH).
Who	<ul style="list-style-type: none"> • Donors • Development Finance Institution (DFI)/International Financial Institution (IFI) • Private sector investors
Why	<ul style="list-style-type: none"> • Insufficient infrastructure and financing to create infrastructure. • Country budgets already stretched in the low/middle income countries where 84% of refugees are hosted. • Large influx of people, now need large amounts of finance and infrastructure. • Host country governments are often not incentivised to address as it's a temporary problem, or they hope it is. • No internal mechanism to finance. • Levying additional taxes on domestic population to cover additional cost of refugees often politically unacceptable. • Not enough money in donor sector, so how to leverage donor capital to mobilise private capital? • Focus on public goods (WASH, Education, Health, etc.) that benefit host community including vulnerable populations and IDPs as well as refugees.
How	<ul style="list-style-type: none"> • Securitised transaction (3 tiers, varying risk/return levels, with donor assuming most of risk but forfeiting return) – repackaging risk: Equity - Donor; Mezzanine - Implementing partner/construction firm/existing programme; Senior - Commercial investor • Revenue flows down as asset pays revenue. If not, then formulate as a development impact bond. If it is revenue producing, asset should pay a return (1/20). • Jurisdiction: donor's country (or legitimate offshore).

	<ul style="list-style-type: none"> • Full range of investor types eligible. • Multiple uses depending on contextual need – and hard asset or revenue producing instrument. • Public good – not addressing just refugees; some will pay, some will get free/subsidised. • Transparency of process; funding contingent on performance and use of asset.
Details	<ul style="list-style-type: none"> • Stakeholders to include: <ul style="list-style-type: none"> • Host country governments. • Donors. • Financial intermediary. • Investors. • Implementing agencies.
Metrics	<ul style="list-style-type: none"> • Capital deployed*³⁶ • Infrastructure built* • Refugee well-being* • Refugee health*
Comments	<ul style="list-style-type: none"> • Identify infrastructure need. • Determine feasibility – what is financial return and social return? • Significant work required to structure & then sell the instrument. • Based on previously implemented instrument. • Large amounts of capital can be mobilised.

Donor or philanthropic capital can take the highest risk (Equity), accepting that they will assume any losses first. In most transactions, the equity tranche, for taking the lion share of the risk, also gets the lion's share of the economics. However, while high risk typically means higher *potential* returns, there reaches a point where risks are so unattractive or unmanageable that no amount of return will attract private capital. And if it did, the cost of capital would be prohibitively high. Therefore, donor or philanthropic capital can take this high-risk position. Equally, it may be possible for donor capital to "donate" some of its return to the senior tranche. Effectively, they would be offering an enhanced return, where for taking senior (least amount of) risk, the commercial sector would be getting equity-like (greater) return. A central tenet of finance is that risk should equal return. By offering investors greater return for the same amount of risk (senior risk with equity returns), donors would be offering investors an attractive deal, which could encourage investors to invest in an asset they otherwise would not.

A hypothetical basic diagram of the structure is below:

	Equity Layer	Mezzanine Layer	Senior Layer
Investor	Philanthropic, NGO	DFI/IFI/NGO	Commercial Investor
Risk	High	Medium	Low
Return	<ul style="list-style-type: none"> • First loss • Principal only 	<ul style="list-style-type: none"> • Principal + 1=2% • Principal Only 	<ul style="list-style-type: none"> • Principal + Libor + ?

This instrument is a type of Asset Backed Security (ABS), which targets a large and liquid capital pool and uses established 'risk layering' techniques. It will however need significant structuring work, including defining either specific infrastructure projects that will be financed or qualifying criteria for projects to be financed.

³⁶ Sections marked with * indicate that these were not included/addressed in the initial Innovation Lab proposals, and instead have been proposed by the DAI research team during the review.

The ABS design can be significantly enhanced by combining different layers with insurance instruments taking specific and well-defined risk. For instance, the mezzanine layer may predominantly face emerging market political risk. Therefore, rather than use scarce DFI capital to accept all commercial as well as political risks, a MIGA³⁷ wrap could specifically be used to remove the key blocking risk i.e. political risk, allowing the senior layer to attach at a lower point, in turn allowing a greater level of private sector capital to be used in the aggregate structure.

This ABS type structure was used in the '10,000 Women Facility' that was seeded by the International Finance Corporation (IFC) and the Goldman Sachs Foundation (GSF) and supported by the US Overseas Private Investment Corporation (OPIC) in 2014 (in this instance OPIC played the role of MIGA identified above.) This initiative recognised the importance of providing access to credit. The IFC estimate that 70% of women-owned Small to Medium Size Enterprises (SMEs) in developing countries are either unserved or underserved by financial institutions, resulting in an estimated US\$285bn credit gap for women-owned SMEs.

IFC and GSF worked with local banks in developing countries to catalyse existing capital for women-owned SMEs by addressing barriers in the lending market. As of May 2018, a reported US\$1bn had been invested in women entrepreneurs in 56 emerging market countries.

5.2.1 Recommendations

Further research into similar ABS instruments should be undertaken, such as the 10,000 Women Facility which has deployed US\$1bn of capital to support women-owned SMEs.

For an ABS to be implemented, the risk profile needs to be specified in detail, so significant work needs to be undertaken to define the investment thesis and objectives. In parallel to this, complimentary risk transfer instruments such as MIGA wraps and other insurance instruments should be explored. This has the potential to reduce the need for donor and philanthropic capital.

Therefore, the second step recommendation would be for a pilot programme to be established to design a potential Humanitarian ABS structure. This will include:

- > engagement with the parties involved in the structuring of the 10,000 Women Facility;
- > identification of qualifying investment assets and geographies;
- > structuring and risk profiling; and
- > market appetite testing including donors, philanthropists and commercial capital.

5.3 INSTRUMENTS RELATED TO HOST COUNTRY INCENTIVISATION

Two of the proposed solutions focused on creating incentives for countries to host refugees. Both proposals recognised that there are potential benefits to countries from hosting refugees, which are explored in the 'Economics of Alternative Expenditure' paper in Annex 6. Both proposals are summarised below.

Solution #4

Challenge	Host Country Challenge
Solution Name	Host Incentivising Development Impact Bond
Solution Summary	Development Impact Bond to incentivise potential host countries to accept and integrate refugees, and/or financing from a central revolving fund.
Who	Host Countries
Why	Evidence suggests that nations that embrace refugees can grow GDP.

³⁷ MIGA – Multilateral Investment Guarantee Agency, the political risk underwriting arm of the World Bank.

How	An attractive package of incentives and support for countries embracing refugees, financed either through a Development Impact Bond if successful or from a central (eg UN) revolving contingency fund.
Details	<p>Preparedness plan (including pre-defined triggers and parameters):</p> <ul style="list-style-type: none"> • Rapid deployment of digital and civil infrastructure. • Indigenous and migrant education and employment. • 'Micro-economy in a box', full stack financial services. <p>Pre-Arranged liquidity from major donors:</p> <ul style="list-style-type: none"> • Could also include debt relief.
Metrics	<ul style="list-style-type: none"> • Attitude of Hosts regarding Refugees. • Ability of refugees to survive, work and thrive, while bring their hosts wider development benefits. • Preparedness plan readiness. • Host GDP changes (increases).
Comments	<ul style="list-style-type: none"> • Willingness of country to sign up will vary over time. • Significant 'basis risk' between accepting refugees and economic gains. • Packages will have to be highly tailored to different host country needs, therefore difficult to agree in advance • Partly programme, partly financial intervention.

Solution #5

Challenge	Host Country & Shape Challenge
Solution Name	Resettlement Challenge Fund
Solution Summary	Resettlement challenge fund for potential host communities (local government / municipalities plus national governments) to offer packages of services and opportunities to refugees.
Who	Host communities
Why	Support and liquidity to incentivise potential host countries to accept refugees and implement progressive policies in their support.
How	<ul style="list-style-type: none"> • Empowering host communities to welcome refugees in a way that benefits their economy and community relieving the pressure from areas with very high concentrations of refugees. • Saving money and reducing animosity and destabilisation, within the spirit of international solidarity for refugees.
Details	<ul style="list-style-type: none"> • Host communities invited to offer 5+ year package of services and opportunities to refugees + price tag. • Refugees to choose between offers. • Donors to fund refugee vouchers through IFI-managed resettlement challenge fund. And be part of negotiation with host communities over offers. • IFI to administer resettlement challenge fund, including financial contracting with host communities and other service providers, monitoring, and protecting refugees.

	<ul style="list-style-type: none"> • UNHCR and partners to advise, protect and advocate for refugees, and to support IFI monitoring. • Researchers to develop evidence base for saving money and what works.
Metrics	<ul style="list-style-type: none"> • Avoided donor costs and economic losses. • Reduction in pressures in first countries of asylum. • Host communities economic and well-being improves. • Refugees economic and well-being improves.
Comments	<ul style="list-style-type: none"> • Helps match refugee needs with host country actions and ambitions. • Various options for funding the Resettlement Challenge Fund, could be a programme rather than a financial intervention. • Has the potential to diversify both the sources of refugee funding and the number of refugee host countries.

Both proposals rely on an agreed set of policies that host countries would implement in return for direct funding and other benefits. The Development Impact Bond is based on an ex-ante agreement of these policies and benefits; whereas the Challenge Fund can be accessed on a competitive basis by host countries 'bidding in' what they are willing and able to offer ex-post. An ex-post process will inevitably take time to properly identify measures; define metrics; and quantify potential benefits. However, the Challenge Fund concept could also be applied to ex-ante initiatives, for example by inviting and selecting proposals from eligible *potential* host countries and making the release of pre-agreed funding conditional on a refugee inflow occurring.

Both instrument types are highly customisable according to the specific needs of host communities and refugees. This also means that these instruments are dependent on the willingness and ability of recipients to propose and implement the related policy or programme interventions, which may vary over time and differ between national governments, regional governments and local host communities. In turn, this could affect the successful implementation of the interventions, and the related financial outcomes of the instruments. However, as discussed in Section 4.1, the results-based nature of Impact Bonds acts to incentivise successful implementation of agreed initiatives, and interventions are usually proposed and/or delivered by organisations with appropriate technical expertise. A Challenge Fund could also release funds on a conditional and/or staggered basis, to incentivise results and maintain oversight of the implementation of pre-agreed measures. However, without the certainty that any challenge proposal made would be successful, it may not be considered 'bankable' (i.e. private finance may not be able to be raised against it). Despite this, both instruments could enable improved outcomes for host communities and refugees, enable greater risk management to attract a broader range of investors, and provide a reliable source of funding to enable pre-positioning and a more rapid response at the onset of a refugee crisis (in turn, likely reducing the overall cost of response).

5.3.1 Recommendation

Similar to other proposals, the establishment of an Impact Bond or Challenge Fund will require engagement with a range of stakeholders, including host countries, donors (both private and public), implementing organisations, and financial organisations (particularly to structure an Impact Bond). An initial step would be to assess the appetite for each of these instrument types, and to specify the priority areas that these instruments could fund (e.g. a Challenge Fund focused on healthcare interventions, or an Impact Bond focused on education interventions). Following this, funding would need to be secured, before the instruments could be structured and launched.

5.4 OTHER CREDIT INSTRUMENTS

Financial instruments related to sources of new credit for host countries and responders were also discussed at the Innovation Lab, though not developed into full proposals. These instrument types can enable faster, more reliable access to funds in response to refugee crises. The conditionality of access to credit can also enable donors and/or investors to better manage risks and incentivise results of the funding.

5.4.1 Contingent Credit

Contingent credit is based on pre-agreed interest rates, maturity and criteria for accessing funds. Typically, access to funds would be based on a pre-agreed trigger, whether a 'soft' or 'hard' trigger, and may also be conditional on other pre-agreed actions. As an ex-ante instrument, contingent credit, particularly if based on a parametric trigger, can increase the speed and reliability of finance for refugee crises. The eligibility conditions of contingent credit mechanisms could also be used to incentivise host countries and/or to encourage pre-positioning (including of refugee self-reliance policy measures). An example of contingent credit from the natural disaster risk sector is the Catastrophe Deferred Drawdown Option (Cat DDO), which provides immediate liquidity to countries following a natural disaster and/or health-related event. Eligibility for the Cat DDO is dependent on a recipient having an adequate macroeconomic policy framework and a satisfactory disaster risk management program, and access to funds is only possible after a pre-specified trigger has been met.

5.4.2 Credit Guarantees

Credit Guarantees are analogous to an insurance policy protecting a lender from default by a borrower. For refugee financing, this would mean that instead of a donor directly lending to a host country, instead the donor would offer a guarantee on the host country debt. This reduces the cost of capital (i.e. borrowing cost) of the host country, in turn attracting private sector lenders' capital that might not have otherwise considered lending to that host country due to risk. By reducing the cost of capital for host countries, credit guarantees also contribute to a reduced debt burden through lower relative debt servicing costs.

5.5 DEBT RELIEF INSTRUMENTS

In addition to instruments related to new credit, other discussions at the Innovation Lab related to the existing debt of host countries. These types of instruments are particularly relevant in the refugee financing context as many host countries are low-middle income countries, with existing debt burdens and domestic financial pressures. As such, instruments that can offer some form of debt relief to host countries can act as a strong incentive.

A key consideration for instruments related to sovereign debt is how to ringfence the benefits of an improved credit rating or line of credit for funding a refugee response, rather than for other types of spending by the host government. The costs of monitoring could be high, and whether a credit rating would or should not change without fundamental improvement in government finances (as measured by the primary surplus/balance of payments) is uncertain.

Similarly, it is important to consider whether it is better to focus on matching cash flows (offsetting the cost to the host country), or to focus on the longer-term incentive of a lower cost of funding for the host country. While a lower cost of capital can act as an incentive for host countries, the actual cost of hosting large numbers of refugees is likely higher, and – all else being equal – will result in larger budget deficits and therefore a higher cost of capital overall. As the cost at which a country can access funds is ultimately driven by capital demand and supply, which are brought into balance by the interest rate, the broader market impacts of the use of debt relief instruments must be taken into account.

5.5.1 Debt Swaps

Debt Swaps, in the context of financing for refugee crises, could involve a host countries' debt being wholly or partially written off by lenders (such as donors) in return for agreed actions being implemented. This could include refugee hosting policies and/or programmes that enable greater refugee self-reliance, such as refugee

access to education, health-care or work permits. Debt swaps also have the additional benefit of reducing the existing debt burden of host countries.

5.6 OTHER SOURCES OF FUNDING

5.6.1 Revolving Funds

Revolving Funds are typically replenished as withdrawals are made, and so can enable large amounts of funding to be available quickly in response to funding needs for refugee crises. Conditions for withdrawal can be defined by similar criteria to those discussed in Sections 4 and 5, particularly triggers (e.g. parametric triggers), or the pre-positioning of refugee hosting policies. A revolving fund could be held centrally, for example by the UN or World Bank, and used to contribute to the cost of response, or to enable access to larger amounts of insurance. A revolving fund could be contributed to by all UN members or GCR signatories, as previously discussed.

5.7 SOLUTIONS RELATED TO ACCESS TO INFORMATION

Three interventions focused on using data collection and dissemination to connect refugees with finance or opportunity providers. While these programmes are outside the original scope of the Innovation Lab, they are nonetheless valuable ideas and as such have been included in full in Annex 9.

Although coming from different angles, these interventions all addressed the lack of useable information about refugee finance. This was also a challenge encountered in the development of the various case studies and defining of the financing challenges being addressed in this report. It was found that while there was a strong intuitive understanding of the challenges, there was a paucity of data to support these intuitions. Therefore, enabling better data collection and dissemination is likely to have multiple benefits, including but not limited to:

- > better understanding of the impact of different interventions;
- > connecting host countries and implementing agencies with refugee needs;
- > providing investors and capital providers with market actionable information; and
- > enabling refugees to access capital to become self-sufficient and/or entrepreneurial.

While there are many factors to consider and challenges still to overcome, the breadth and creativity of the Innovation Lab proposals and the success of relevant mechanisms in the disaster risk context indicate a wealth of opportunity for the further development of innovative financing for refugee crises.

6 CONCLUSION

The plight of refugees is fundamentally a human one. However, the funding and financing of refugee assistance is an inseparable part of their story and a growing challenge. In a context where refugee influxes are growing in size, consistently underfunded, and persistently lasting for upwards of 10 years, there is an urgent need to re-think how international financing can best address these challenges, first and foremost to meet the needs and improve the lives of refugees. An indicative analysis of the economics of alternative approaches to refugee response suggests that the international donor community could save billions of dollars through more proactive funding structures, supporting the financial and economic case for alternative financing.

It is clear from the output of the Innovation Lab and the level of engagement by stakeholders at both events that there are significant opportunities and interest in applying innovative financing techniques and structures in support of refugees. By doing so, the following benefits can be realised:

- > increased levels of funding, including through attracting new sources of funding;
- > making funding available faster;
- > making funding last longer;

- > using existing scarce public capital more efficiently and effectively;
- > ensuring sufficient funding is available, even in years of extreme refugee flows;
- > encouraging and supporting low- and middle-income countries that predominantly act as refugee hosts; and
- > increasing the opportunities for self-reliance for refugees.

To realise these potential benefits and continue the development of innovative financing for future refugee crises, it will be essential to focus on prototyping, testing, and learning at speed, to continuously assess impact and maintain momentum. A number of related initiatives need to be undertaken, and along with the solution-specific recommendations made in Section 5, the below recommendations are made.

Stakeholder Collaboration

As highlighted by the Innovation Lab, a diverse range of stakeholders (many of which do not typically collaborate with each other) need to be engaged. As such, there needs to be a lead organisation that draws these actors together in discussions, forums, initiatives etc. to maintain the collaboration between humanitarian, development, insurance and finance actors.

There is significant potential for cross-sectoral learnings in the development of innovative finance for refugee crises, including drawing on experiences from financing initiatives established in other humanitarian and development sectors, such as parametric insurance and impact bonds; as well as adapting private sector capital market and insurance techniques to develop new and appropriate refugee financing instruments. The effective development of truly innovative financing instruments, that can attract new sources of capital and can more effectively meet actual financing needs, will be dependent on the coordinated effort across public and private actors.

Trusted organisations with established stakeholder relationships and innovation capabilities in the humanitarian and specifically refugee response sector can help to catalyse such collaboration, as has been demonstrated by the two Centres through the Innovation Lab. Forward thinking donor governments have an important role to play in the political leadership that will be needed to engage existing and potential donor governments. Global and regional development banks that have the institutional and financial capabilities to execute transactions will be needed. Combining this with the additional skills, competencies and capital that exist in the private sector will undoubtedly be of long-term benefit to refugees, host countries and the global community.

As such, it is recommended to:

- > Engage with existing donors to understand their current perspective, as well as interest and ideas for innovative financing initiatives;
- > Engage with host countries to understand their needs and concerns with existing financing mechanisms, as well as interest and ideas for innovative financing initiatives;
- > Engage with private sector capital markets and insurance entities to increase awareness of innovative finance opportunities, to understand existing relevant initiatives, and to gauge interest for innovative financing initiatives; and
- > Establish a 'Working Group', which could be led by the Centre for Disaster Protection and made up of a range of key stakeholders, to ensure continued collaboration and drive the innovative financing for refugee crises agenda.

It should be noted that a number of Innovation Lab participants raised two key issues for further discussion – IDPs and the political economy of financing for refugee crises, including the varying nature of displacement events (such as disaster, conflict, and economic), centring the needs and wants of refugees, and incentivising and obtaining buy-in from a diverse range of stakeholders in what are often inherently politicised situations. While these areas were out of scope for the Innovation Lab, this is a useful insight into the thinking and concerns of stakeholders and highlights important considerations for future engagement.

Data Sources

The further development and implementation of existing and emerging technologies also has an important enabling role to play. A number of innovative finance concepts, including parametric triggers, will only work if there is a robust and reliable way to measure, monitor and predict refugee flows. The improved collection and use of data is also important to increase access to finance for refugees themselves, such as through the establishment of credit histories.

The current lack of data on financing for refugee crises has been a recurrent problem in the delivery of the Innovation Lab, and will continue to limit the development of innovative financing initiatives. As such, improvements to the collection of, access to, and usability of relevant data is essential.

It is recommended to:

- > Undertake a detailed scoping of tracking, monitoring and prediction technologies to identify relevant initiatives that could be utilised and/or further developed. Annex 7 presents a brief introduction to such an exercise;
- > Undertake a detailed scoping of established and nascent data sources to identify those that could be utilised and/or further developed. Annex 8 presents a brief introduction to such an exercise;
- > Engage with existing technology developers and data source owners to improve access to and usability of data, where possible;
- > Support the further development of relevant technologies and/or data sources, specifically for application to financing for future refugee crises. This could be undertaken through additional technology and/or instrument-specific workshops; and
- > Undertake further studies on the impact of migration and refugee status on refugees, as well as the potential mitigating effects of alternative responses.

Communications

Also, the ongoing work in innovative financing for refugee crises needs to be communicated effectively, to increase interest and build support for initiatives. Communications can include publication of reports, engagement with media, and high-level meetings, among others. The development and publication of a 'good practice guide' for innovative financing solutions could also be produced, to guide the efforts of the wide range of stakeholders involved.

Development of Financial Instruments

The scoping, structuring and implementation of innovative financial instruments will be essential in successfully delivering new approaches to supporting refugees.

- > As such, it is recommended to conduct further research and scoping of 3-4 instrument types, including a mapping of needs, potential partners, and feasibility across different geographic areas or existing crises, with an aim to then select 1-2 pilot instruments to be developed.

When considering the current context of financing for refugee crises, along with the discussions and solutions proposed at the Innovation Lab, a few focus areas become apparent.

Firstly, the existing humanitarian system is already under increasing pressure, with funding from existing donors limited. As such, instruments that rely too heavily on attracting additional funding from existing donors (e.g. such as a revolving fund with small contributions from all UN members) are less likely to gain traction. Rather, it could be more fruitful to focus on instruments that have the potential to attract new actors and sources of funding, particularly private sector capital. Furthermore, rather than reinventing the wheel, emphasis should be on learning from and the adaptation of successful risk-based instruments in other sectors.

Based on these considerations, the proposed focused instrument types include:

- > Parametric insurance and insurance-linked securities, including risk pools, as discussed in Section 5.1
 There is now significant experience among donors, recipient governments and responders in the development of disaster risk parametric insurance pools. As such, appetite for such an instrument could be higher than a new type of instrument, and there are a number of lessons to be learnt from these examples that can be applied to the refugee financing context.
 The Global Refugee Finance Cat Bond (Solution 2), which can be considered in the context of Cat Bonds or Parametric Insurance, has significant potential for risk transfer to the private re/insurance sector due to its risk profile. As such, this instrument type has potential for uptake by the private sector, attracting new sources of capital
- > Other securitised instruments, such as the Humanitarian Blended Bond (Solution 3), as discussed in Section 5.2.
 This instrument aims to respond to infrastructure needs in host countries, through the development of a securitised product. The tiered structure of this instrument attracts both public sources of funding and new sources of private capital. The 10,000 Women Facility, seeded by the IFC and Goldman Sachs Foundation, supported by OPIC, is reported to have deployed US\$1bn of capital to women entrepreneurs in 56 emerging market countries, and is an example of a similar instrument that could be looked to for learnings.
- > An Impact Bond (Solution #4) to incentivise refugee integration in host countries, as discussed in Section 5.3.
 Drawing on the examples such as the ICRC Humanitarian Impact Bond, this instrument type can attract new sources of investment, by managing risk and incentivising results through a performance-based payment structure. However, it is important to note that Impact Bonds require programme impact to be very accurately measured, meaning that this instrument type is only applicable to specific, typically smaller-scale types of interventions.

A New System of Financing for Responses to Refugee Crises

The growing scale, duration and impact of multiple semi-permanent refugee crises requires innovative approaches to financing that are more efficient, more effective, more equitable, and more sustainable. This will not only generate economic benefits, but most importantly will ensure the continued support and reduced suffering of millions of people worldwide. The Innovation Lab has acted as an important catalyst in the multi-sector, collaborative effort required to deliver innovative financing for future refugee crises, and has identified key focus areas to further this initiative. Each of the above recommendations – stakeholder collaboration, development of data sources, communications, and development of financial instruments – are interrelated and cannot be undertaken in isolation. Ultimately these recommendations represent the catalysation of a new system of financing for responses to refugee crises, with a consistent purpose, common language, and a collaborative, evidence-based and action-oriented path forward.

7 LIST OF ANNEXES

All Annexes are provided in separate documents.

7.1 ANNEX 1 – RETROSPECTIVE EXPENDITURE ANALYSIS

7.2 ANNEX 2 – CASE STUDY: BANGLADESH

7.3 ANNEX 3 – CASE STUDY: JORDAN

7.4 ANNEX 4 – CASE STUDY: KENYA

7.5 ANNEX 5 – GLOBAL CHALLENGE: HOW COULD DATA BE USED TO CAPTURE REFUGEE FLOWS IN A FINANCING INSTRUMENT?

7.6 ANNEX 6 – ECONOMICS OF ALTERNATIVE EXPENDITURE

7.7 ANNEX 7 – SUMMARY OF INNOVATIVE FORECASTING TOOLS FOR REFUGEE CRISES

7.8 ANNEX 8 – SUMMARY OF DATA SOURCES FOR REFUGEE CRISES

7.9 ANNEX 9 – INNOVATION LAB: INFORMATION-BASED SOLUTIONS